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No. 4 From May 16, 1836 To September 7th 1836 First Draughts without connections

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1. <u>Pulse Glass</u>

Finding this little Instrument in the Shop of Philosophical Instruments at Boston, I purchased it, under the supposition that it indicated the pulsations of the human body. It consists of a small glass cylinder terminating at the ends with small bulbs, about half filled with colored alcohol, the remainder with air, and hermetically sealed.

By grasping one of the bulbs in one hand & holding it in an inclined position, a part of the air included

in

in the grasped bulb, a motion of the liquid commences resembling the pulsations of the wrist, and at first seems to keep time with them. But on a careful examina tion I became convinced that the oper ation had no relation to the pulse; that the beats were not isochronal and that the motion of the fluid, as I conjectured before the experiment was made, would continue if the lower bulb was immerced in warm water & with a rapidity greater or less, in pro portion to the increase of diminution of the heat of the water. The experiment justified this supposition.

Rationale of the Pulsations.

The air confined in the lower bulb by the pressure of the superincumbent fluid, expands by the heat of the hand, driving the fluid up the cy linder until a part escapes to the

upper

‡Since writing this, I have perused a letter on the same subject from Dr. Franklin to John Winthrop, inserted in Vol. 5 of Franklin works by Mr. Sparks. The instrument the Dr. found in Germany, where he brought it to England, where [][] constructed. The term Pulse Glass is not given to the Instruments

upper part of the tube, when the air becomes reduced in the bulb, the spirit falls back. The air being again expanded by the heat of the hand, more of it again rushes out and passes up the tube, and in this manner the puls ation continues, until the air is ex hausted in the lower bulb. Instead then of showing the pulsation of the body, the Instrument only shows the heat of it: and of course in a cold hand the motion will be slow. By grasping the body, with snow in the hand, it is presumed there would be no pulsations, but I have not made the experiment. When the air is considerably reduced in the lower bulb, by reducing the temperature it will contrast to a mere point hardly to be perceived. Addition al heat will again enlarge the air in the bulb, showing a remarkable [1 of the air at the smallest quantity. ‡

2. <u>Secretary Cass Report on</u>

Fortifications: April 7, 1836 In his remarks upon a militia as an auxiliary to fortifications, the secretary says "I consider it one of the most momentous topics that can en gage the attention of Congress; and the day that sees a plan of organization adopted suited to the habits of the people and the nature of our institu tions, and fitted to bring into action the physical strength of the country, with a competent knowledge of their duty, and just ideas of discipline and subordination, will see us the strongest nation, for the purposes of defence, on the face of the globe. Certainly such an object is worthy the attention of the Legislature." "It cannot have escaped the recollection of those who were upon the theatre of action at the commencement of the last war, that the first year was almost spent in a series of dis

asters

asters, which however brought their advantages. We were compara tively ignorant of the state of military science, and we did not fully recov er our true position till we had received many severe lessons; at what an expense of life and treasure need not be added." "If a more efficient organization does not take place, I think the ex penditure on this account (field artillery) may well be saved to the public treas ury. I consider all attempts to im prove the condition of the militia upon the present plan, as nearly useless, that the whole system has become a burden upon the public without any corresponding advent age. The principal benefit which results from the existing state of things is the power to call into the service such portions of the population as may be wanted. But this may be attained by a simple classification without

without the <u>cumberous machi</u> <u>nery</u> which at present creates expense and trouble, and which while it promises little, performs still less."

The remarks of the secretary are judicious, and I hope they may make an impression on the minds of the members of Congress. The "cumberous machinery" to which he alludes, must be the present organization of the militia; and until this be given up and a different one adopt ed, we shall never have a respect able militia.

The Secretary's plan of defensive fortification, meets my views. He pro poses to erect strong works at our prin cipal sea ports, and navy stations, leaving other points to the defense of land troops. To me it appears that our present army should be in creased to about 10,000, to serve as a skeleton to a larger force in

case of war. A select militia, trained in time of peace to a "competent know ledge of duty and just ideas of discip line and subordination," to be added to the regular force, would be amply sufficient for our defense in any ordinary war. If a greater force should be found necessary, detach ments from the common militia would supply the deficiency. These detachments to be joined with, or incorporated with the standing troops or the select militia. Hence it ap pears that an organization of the common militia into regiments, brigades divisions &c. is hardly necessary That they be kept enrolled under some head ready to be detached, is all that is necessary important; and indeed their services will seldom be wanted, provided the army and select mi litia be kept complete under a proper system. Nothing short of a plan of this kind will ensure safety.

3. Old Road from Hatfield to Deerfield

By an examination of the survey of the road from Hatfield meeting house to the north end of Deerfield Street, made in, or about 1759 and accepted by the Court of Sessions in Hampshire County I find the courses to correspond very nearly with the present courses. From the center of the start at the south end, to a point near the middle, or near the south east corn er of the meeting house then standing, the course by the needle is laid down N 17° 30' E, coinciding with the present Course with great precision. By the same minutes it appears that the River at the south end, has encroached at least 22 rods upon the land, within 77 years. Should the River contin ue the same rate of encroachment in two centuries it will nearly reach the souh end of our Street. According to the Old rule of allowing

for the variation, in 1836 it would give the course N 14°:30' E (nearly) Hence it is evident the needle is mov ing to the west (north end) with rapidity. Say about 6 minutes in the year. By this old survey the road from Hatfield meeting house to the north end of the Barstreet was laid 6 rods wide, thence through the south mead ows to the lane at Temples, 2 rods; thence to the south end of the main but 2 ½ rods; thence to the North end of Deerfield Street, the width is 5 ½ rods. The course from the SE corner of meeting house, as a point near this, corner as mentioned above, is N 16°E. Since the old survey another was made (about 1800) and accepted by which the road from the North end of the Bars to Northampton is reduced to 4 rods in width; the other part remaining as in the old survey, which seems to have been made by a skillful hand, and the minutes well kept.

4. Creek Indian War

These Indians have for some time ex habited a spirit of hostility towards the the contiguous inhabitants, and are now embodied for war. A considerable number of our people have been massa cred. About the middle of May the Inhabitants of Wetempka, a town on the Alabama river, or a branch of it called Talapoosa, were in expectation of an Attack and were making preparation for defense. The Catlins from Deerfield, reside at the place and Henry who kept a store about 60 miles distant, lost a quantity of Goods which he was trans porting in wagons to a place of security and he narrowly excaped from the Indians. Samuell is named in a Wetempka paper, as the Chairman of a Committee of Safety at that place, and a Battalion for defence. The governor of Alabama has ordered a detachment of about 2400 militia, to march to the frontiers;

with this force, and another, which probably will join from Georgia, we think the Indians will be held in check, and perhaps driven from their lands and unite with the Seminoles in Florida. The Country of the Creeks is by no means so difficult to penetrate as that of the Seminoles; but the former are more numerous. Every day we are more and more convinced of the necessity of a disciplined force being prepared for sudden emergencies, by the US Government. The regular Army and a select militia or elite corps, properly disciplined, would in sure safety to our frontiers; and we hope most ardently that Congress will raise from their lethargy and prepare such a force, before the frontier people suffer further de pradations. The war on the part of the Indians no doubt originated in the injustice of our Government, but whe ther this is so or not, we must now

conquer them, per fas et nefas¹ or give up our settlements bordering on their territory; for when once roused to war they cannot be brought to terms of peace by other means. To prevent a junction of the Creeks with the Seminoles, a strong force should be stationed in the western quarter of Florida; but as such a force is not found there at this time, a junction may take place, which will be an unfortunate circumstance, as the war may be prolonged in the pen sula.

Situated as the Creeks are, between Alabama and Georgia, it will be im possible for them to maintain their ground after those states send troops into their settlements, and the poor fellows will soon be compelled to give up the conflict and probably their lands to their avaricious neighbors, who will seize on the war as an excuse for for exterminating them. Justice out of the question. The war spirit

¹ Latin for "through right or wrong"

seems to be spreading among the Indians along the western and northeastern border of the US, and should they act in concert might commit serious depredations on our our exposed inhabitants. But they are so few in numbers and so spread over the Country that it is impossible for them to make much impression.

5 On Militia Notions.

To the military man who has attended to the art or science of War and persued the writings of Washington and other experienced officers, it is sickening to notice the remarks of our news paper editors on the low state of discipline among our militia. They take it for granted that this body, a few years ago, was competent to the defence of the Country in any exigency and that because we are convinced of the errors of those times and are endeavoring to intro duce a system better adapted to our circumstances, we are supposed hostile to

this species of force, and are endeavoring to destroy it and introduce a standing army. The same crude notions now prevail that were formed among us at the commencement of the revolutionary war, and which it required years for Gen. Washington to eradicate from the public mind. Fortunately he at length succeeded and saved the Country from ruin.

The confidence entertained of the adequa cy of a militia for defence in case of war, is surprising and to be accounted for only on the ground of a total ignorance of the military art. Nearly, we may say all, experienced officers are convinced of the futility of intrusting our defence to undis ciplined militia; and so long as the notion prevails that all of our citizens should be disciplined, there can be no real discipline introduced among them. The truth is we have been too long amused with the puerile show of our regimental parades, in which the

tilt of a sword and the flourish of a stand of colors are considered of great importance; and this dexterity added to a brilliancy of dress, better fitted for the ball room than the field of mars, have been considered the summum bonum² of the military art, and thus we have been led by an ignis fatuus³ until we have lost almost every principle of real discipline.

That those among us who judge of the prowess of troops from such show, should be led into egregious errors, is not strange; but that men of inform ation and judgment should adopt sinular notions is not readily explained.

We had flattered ourselves that our leading men were becoming enlightened on this subject, and that with their aid a system of national defense would be adopted that would render us respectable among the nations of Europe, who now smile at our infatuation and false security.

But judging from the speeches in Congress, and the occasional addresses of

² Latin for the "highest good"

³ Latin for "foolish fire," meaning something deceptive or deluding

some of our men in power, we almost despair of any improvements in our militia system, until we shall find its inefficiency by a war at our door.

In a late address of Governor Ever ett to the ancient artillery Company in Boston, he seems to consider those opposed to the present militia system as hostile to the welfare of the Country, and treats of the great feats of our old militia in our various wars, without adverting to the change which necessa rily takes place in a people as they advance from a rude to a more polished state, in which the masculine virtues of frontier men are lost in the show, superfluities and gew gaws which abound, as riches increase.

At the close of his address, he gave the following sentiment "A well organ used, efficient and patriotic militia in time of peace the bulwark of the law, in war the basis of defence: may it be <u>restored</u> to the public fa vor."

By a restoration to public favor, does his Excellency mean that we shall again resort to the system of company and regimental trainings, which have become unpopular from the very fact that they are wholly useless-A fact that the people have learned by experience? Or does he really be leive that the former system, if restored, would render the militia more formidable in fight than than the present. The cry about the low state of the militia is a mere scare crow: they to be sure make less show, but all that ever was value ble in them is still retained. Viz. their numbers and arms. Attempts to discipline them were always futile, and at this time obviously so.

His Excellency calls the militia the <u>basis</u> of defence in war. Does he mean by this that as a <u>military body</u>, they are

capable of defending the Country. The population of our country is, to be sure, the basis of an army, because an army is raised from there; but it cannot be supposed that the militia as such, are better prepared for the field than an equal number of other citizens who are able bodied. The fact is, man without discipline, in the strict sense of the word, are unquali fied to act in large bodies against mechanized troops. In small parties in the woods, they may render some service as marksmen.

Washing tons sen timents on a militia

In a letter from Gen Washington to the Governors of the States, written in 1780, after an effectual trial of the militia in various campaigns, he says "It is time we should get rid of an error, which the experience of all mankind has exploded, and which our own experience has daily taught us to reject; the carrying on a war with militia, or which is nearly the

same thing, temporary [] against a permanent and disciplined force. The idea is chimerical, and that we have so long persisted in it, is a reflect ion on the judgment of a nation so enlightened as we are, as well as a strong proof of the empire of prejudice over reason. If we continue the in fatuation, we shall deserve to lose the object for which we are contending. America has been almost amused out of her liberties. We have frequently heard the behavior of the militia ex tolled upon several occasions, by men who judge only from the sur face, by men who had particular views in misrepresenting, by visionary men whose credulity swallows every vague story in support of a favorite hypothesis. I solemnly declare I never was witness to a single in stance that can countenance an opin ion of militia or raw troops being fit for the real business of fighting. I have

found them useful as light parties to skirmish in the woods, but in capable of making or sustaining a serious attack. This firmness is only acquired by Habits of dis alpine and service. I mean not to detract from the merits of the militia; their zeal and spirit up on a variety of occasions have entitled them to the highest applause, but it is of the greatest importance we should learn to estimate them rightly. We may expect every thing from ours that militia are capable of; but we must not expect from any, services for which regulars alone are fit." (Thinks)

Gov. Everett may rely on the a restored militia for a basis of de fense in war; but Gen. Washington it is obvious, placed no confi dence in such forces.

In a late Report of Secretary Cass, on the subject of fortifi

cations he says "It cannot have escaped the recollection those who were upon the theatre of action at the commencement of the last war, that the first year was almost spent in a series of disasters, which however brought their advantages. We were comparatively ignorant of the state of military science, and we did not fully recover our true position till we had received many severe lessons; at what an expense, of life and treasure need not be stated."

For several years previous to this war, the Country, and especially the northern States, had made great executions to discipline the the militia which and it was supposed by many, to have arrived at considerable perfection; yet says Secretary Cass we were comparatively ignorant of the state of military science, admit ting this as a fact, those who are so zealous of industry the

whole of our enrolled men, may learn how little can be done towards the requisite instruction. With all our execution, military science has been on the wane, and this must forever attend a system founded on the basis which attempts to make all so diers. The remedy is plain and easy. Select a small part of the enrolled men and dis cipline them a sufficient time in the field, under pay and Subsistence, and hold them ready for the field service on the shortest notice;--the remainder to be kept armed, and to make return of these arms and equip ments annually, and field ready to supply recruit, for the elite, as circumstances may require.

This scheme conveyed into effect, and continued, the Country would be safe, and

See page 4 Sketch -es

military science, in time of peace, in stead of waning, found progressive.

Of the importance of a proper system for a militia, Secretary Cass seems fully aware: he says "I consider it one of the most important momentous topics that that can engage the attention of Congress, and the day that sees a plan of or ganization & adopted, suited to the hab its of our people and the nature of our institutions, and fitted to bring into action the physical strength of the country, with a competent knowledge of their duty, and just ideas of discipline & subordi nation, will see us the strongest nation, for the purposes of self de fence, on the face of the globe. Cer tainly such an object is worthy the attention of the Legislature."

Speaking of the militia under the present system he says, "I con sider all attempts to improve the condition of the militia as nearly useless, that the whole system has become a burden upon the public without any correspond ing advantage. The principal benefit which results from the existing state of things, is the pow er to call into service such por tions of the population as may be wanted. But this may be attained by a simple classifi cation, without the <u>cumberous machinery</u> which at present creates expense and trouble, and which, while it promises little, performs still less."

Does Gov. Everett believe the Secretary is hostile to a militia be cause he would repudiate the present plan?

Let him reflect farther on the subject, and we are confident his penetrating mind will not long continue in the error, into which he and others of our Statesmen have suffered

suffered themselves to run from the false glare that has hitherto been thrown around the childish military parade of our citizens at our annual musters, where meretricious show has usurp ed the place of real discipline and created a false reliance on our na tional prowess, from which we fear, nothing will clear away but a bloody war brought home to our fire sides.

6. <u>The Weather</u>

The uncommon severity of the past winter we have frequently noticed, and it was a question with us whether the sum mer which was to follow would present any thing uncommon as we conjectured it might; and up to this June 25, we have found the season cold and of course vegetation back ward. For a number of days we have had a series of cloudy weather attended with rain, and the heavens contin ue covered with [] clouds. So cool

is the air that fires are required to keep our sitting rooms comfortable, and a winter dress is not oppressive a continuance of this weather will be unfavorable to the crop of Indi an corn, which is the great sta ple of our meadow lands.

7. Traverse of Sheldon's Brook, from the small Bridge over the same on the Shel burn road to its mouth opposite to White Swamp in Deerfield North mea dow, taken by C.T. Arms, June 1836. Note The bridge mentioned above is across the 2d Brook Southerly of Loveridges house; another brook is found farther North called Cary's brook. 1E 18° S 14 Rods to cary's Brook 2 S 23 E 26.3 S 44 ½ E 26 4S 35E 20.5E 7S 58 (in this course I suppose a tally too much is included) 6 N 41 ½ E 12.7E 8S 11. 8S 43 ½ E 29 ½ (at 12 ½ Edely bridge) 9 E 4N 26 16 10. S 60 ½ E 49-7 to NWL Jones Barn. 11E 10 ½ S 38.6 12.N 45E 8. 13.E 7 N 14 . 14.S 47 ½ E 12.

15E 3 S 5..15.16.S 40 E 6 to D. River.

The traverse was made near the brook, the stations sometimes on side, and some times on the other: the brook being of the very serpentime crossing the cours es back and forth. From the com mencement of the traverse to Edely bridge the brook is in a deep valley, from that point to Jone's the valley expands, but is again narrow thence to its mouth. The variation of the needle at the time must have been 7°-15' west nearly

Within my recollection the Brook entered Deerfield River near the upper end of Clesson's Swamp, a considerable distance below its present mouth. The alteration is owing to the abrasion of the left bank of the river, above the brook. Near its mouth was formerly a good ford, and another below. A road formerly ran from the head of Clesson's Swamp up the 2 hills northerly across Petteys Plain, the same I suppose traversed by the Indians with the Deerfield prisoners in 1704.

Historical Reminiscences

8. At the top of the 2d hill near Sheldons brook since my remembrance stood a large pitch pine tree, on which was cut out a representation of a human body, supposed to be carved by the Indians who sacked Deerfield in 1704, under Hertel de Rouville. The tree was cut and removed by John Williams Esqr. to be placed in a museum, but I believe never so placed. I saw it in his wood yard some time after where it must have decayed. It is supposed Capt. Turner crossed Deerfield River at the mouth of Sheldon's brook, on his march to the shad fall, from Hatfield, and that his men returned on the same route followed by the enraged Indians. This expedition was in 1676. Near the mouth of this brook and perhaps up nearly as high as Jones house, we are my father informed me Rouville deposited his snow shoes and baggage, when he advanced to attack the village of Deerfield; and on the same ground the prisoners were

Historical Reminiscences

bound to be massacred in case his force was defeated in the action that occurred in the meadow south. These reminiscences render this ground in teresting to the antiquary—and I sel dom pass it without reflections on the appalling situation of our fore fathers and their subsequent hard fate. This ground before it was cleared was famous for partridges, and here I have indulged myself in hunting them, and generally with good success. The land about the brook is much cleared of its woods; but should remembrance by the [] of the sufferers and The shrill war whoop and nightly howl of the wolf has long since given place to the peaceful arts of agriculture. The ground should not be forgotten by the sons of the sufferers. Where the Brook derived its name does not appear, unless it be from a field cultivated by one of that name near Jones' House 30

9. The Microscope

"Why has not man a Microscopic eye? For this plain reason, man is not a fly. Say what the use were the finer optics giv'n To inspect a mite, not comprehend the heavens"⁴

The Poet here supposes that to possess any of the sensitive faculties in a higher degree, would render man miserable. How far this may hold true is a question not readily solved. If it be true that our first parents were created with lighter faculties than we now possess, it would be hard to admit that we should have been less happy be retain ing our primitive state.

But be thus as it may, it is certain a microscopic eye is not <u>necessary</u> for man, whatever it be for insects, which we suppose possess none of those in ventive powers found in man. The lat ter by a due use of his powers is capable of almost unlimited improve ments; and though not furnished with a microscopic eye, by his

⁴ From Alexander Pope's Essay of Man, Epistle I.

power of invention he can provide instruments which, perhaps, enable him to disarm objects more minutely than the supposed superior sensitive faculties of the insect.

The invention of the microscope has opened to us a new world not only of animated beings, but of inanimate forms, which could not have been known without this instrument, and we may now be said to possess microso pic eyes, which enable us to see the minute works of Deity in considerable perfection; which excite our wonder and astonishment: and when "Presented to the cultured eye of taste, no rock is barren and no wild is waste."5 Aware of the importance of the microscope in the study of natural history I have long been desirous of obtaining one of those instruments, to be kept in my family; but the expense of one has been beyond my means, and I have until lately, been obliged to acquire my

⁵ From Sir Martin Archer Shee's *Rhymes on Art*.

information on microscopic discoveries form authors who have been more fortunately situated than myself.

Recently, calling at the a philosophical Instrument maker's shop of Claxton & Wrightman in Corn hill Boston, I found a cheap compound microscope, mounted on a wooden stand, neatly varnished furnished with two magnifying lenses of high powers, reflector & two sliders with six different objects. Some of the requisite apparatus is wanting but can be easily supplied, so as to render the instrument fit for most pur poses.

Among the objects which I have examined under the instrument none have been more pleasing than the crystallized salts. Solutions of these spread upon clean plain Glass and evaporated in the rays of the sun, form most beautiful crys tals of a pleasing appearance, differing in their form, each preserving its peculiar

liar structure; Crystallized alum presents a very pleasing view of columns [] and angular contours resembling mountains on nicely engraved maps, with their various shades. Muriate of Soda, or common culinary salt, presents square pyramids very distinctly marked. Other salts present pleasing varieties of crystals and all highly in teresting to the reflecting mind.

In the use of the microscope much depends on a skillful application of the light reflected from the mirror.

When the field of view is white objects will appear dark, or even black, but with a dark field the same objects will present a beautiful white. This is the case with small masses of table salt, and other substances through which the reflected rays cannot penetrate. But if the salt be illuminated by light from above it appears in its proper colour.

The Crystals of <u>nitrate of potash</u>⁶ or salt petre present forms very sin gular

⁶ Also known as Potassium nitrate KNO₃.

gular often resembling prisms like haved timber framed together in various directions, sometimes forming right angles and parallel sides, the lines perfectly straight. Figures resembling a <u>fleur de luce</u> are seen and geometrical surfa ces of an octagonal form meet the eye, and others of a most fantastical form, all very pleasing to a careful examin er.

For a description of the Crystalline Forms hitherto observed in the min eral kingdom, See the article <u>Crystal lography</u>, Edinburgh Encyclopaedia Vo. 7, Chap. 3: And for the manner of <u>dissecting crystals</u> [] work & art Chap 1. Under this article the subject of Cristallography is treated of at considerable length, and much light thrown on the subject.

A careful examination of the laws of nature cannot but excite the wonder & admiration of the natural phylos opher, and lead him to serious re

flections on the profound works of Deity. Mr. Parkes has the following pertinent remarks on this subject, in his chemical Catechism. "We have abundant reason to believe that no thing is fortuitous, but that every thing upon this fair world of ours is the effect of design; for every thing around us bears evident marks of the skill and beneficence of its Om nilpotent Author. Is it not then reasonable to infer, that the formation of the whole Globe entered into the divine plan; and that the consti tution of the interior of its mountains resulted from the determination of infinite wisdom, and must have important uses in some future pe riod of the world?"

With such a view of the works of nature how paltry must appear that system of divinity which repudiates the study of natural philosophy, as the empty & useless invention of man?

The Weather

At our last notice, June 25th, the weather was cool and uncomfortable with out fire. For several days past (July 8th) we have had the usual summer air which enables us to throw off our winter clothing. The meridian altitude of the sun, this day, is about 70 degrees =20 from the zenith, and his rays are acting with full vigor, and there are no intervening clouds. Our farmers are now engaged in gathering their hay but later than common. In some seasons, this business is completed be fore this time. This season is always a busy one our laborers work hard and suffer much from the hot wea ther, but they make use of little or no ardent spirits. Water being the principle drink. Quere Whether ginger and sugar mixed with water would not be more wholesome? Formerly we used common table beer, prepared from Malt & hops,

but this was at length almost wholly laid aside, and ardent spirits introduced, a most pernicious practice. We are glad to witness the reform and hope it will be prepetu ate.

11.-

Eyes of Insects

Unlike large animals, the eyes of in sects are fixed, or incapable of motion, find it is necessary for some con trivance to inable them to see objects that do not present themselves direct ly in front of them. In general in insects, there are two convex eyes, one on each side of the head, protuberant and rising rather more than hemis pheres. To the naked eye their surface appears plain; but by help of the mi croscope it is found that the whole surface consists of a multitude of lenses, separated from one another by hexagonal figures, and placed in ex act order, something like a multiplying

reflector. <u>Lawenhock</u> says each eye is composed of 3,000 optical organs & consequently both eyes double that number. In different insects the num ber varies. It is said <u>Lawenhock</u> counted 8,000 in the eye of a common house fly, and that Hooke computed 7,000 in that of the house fly. In a butterfly <u>Puget</u> found 17325.

Thus furnished insects are enabled to see objects in all directions, and hence we find it difficult to seize a common house by surprise. Their sight seems to be extremely nice; but whe ther objects are more magnified on de minished than in our eyes does not appear. From an experiment said to be made by Lawenhock we might sup pose objects are diminished. Having prepared and fitted one of these eyes (which when separated and made clear the hexagons are transparent) to a microscope he could see through it clearly, but the largest objects were diminished to a small size in

some instances even to the point of a needle, seen with the naked eye. Many insects are said to have, besides the large eyes, also 3 small spherical bodies placed triangularly on the crown of the head, called by writers on entomology <u>ocelli</u>, or <u>Stimmata</u>. These are seen when the in sect is submitted to the microscope, and what are their particular use, I know not. If <u>fixed</u>, they cannot see objects sit uated far out of a direct course.

In the structure of the eyes of insects we have found the proof of design in the creator. Considerations of this kind "raise in us the most magnificent ideas of the Supreme Being, who is every where and at all times present; displaying his power, wisdom and goodness among all his creatures, and distributing happiness to immeasurable ranks of various beings."

Old Age

12. The immediate cause of the infirmi ties of age, or of the progress of life to death, Doct. Darwin says, has not yet been well ascertained. The answer to the question, why animals be come feeble and diseased after a time though nourished by the same food which increased their growth from infancy, and afterwards supported them for many years in unimpaired health and strength, he says, must be sought far from the laws of animal excitability, which though at first increased, is afterwards de minished by frequent repetitions of its adapted stimulus, and at length ceases to obey it. See Note 7 on this subject—"Temple of Nature, or the origin of Society, A Poem"—page 158

The poet in the same note, treats of the means of preventing the ap proach of Age, which he says must consist in preventing the inexcitability of the fibres, or the diminution of the production of sensorial powers; and he lays down the following;

As animal motion cannot be per formed without the fluid matter of heat, in which all things are immers ed, and without a sufficient quanti ty of moisture to prevent rigidity, nothing seems so well adapted to both these purposes as the use of the warm bath; and especially in those who become thin or emaciated with age, and who have a hard and dry skin, with hardness of the coat of the arteries; which feels under the finger like a cord: the patient should sit in warm water for half an hour every day, or alternate days, or twice a week; the heat should be about 98 degrees on Fahrenheit's scale, or of such a warmth as may be most agreeable to his sensation; but on leaving the bath he should

always be kept so cool, whether he goes into bed or continues up as not sensibly to perspire. During the continuance in the bath the patient does not lose weight, unless he goes in after a full meal, but generally weights heavier, as the absorption is greater than the per peration; but if he suffers himself to sweat on his leaving the bath, he will undoubtedly be weakened by the increased action of the sys tem and its exhaustion. the same occurs to those who are heated by exercise, or by wine, or spice, but not during their continuance in the warm bath: where we may conclude, that the warm bath is the most harmless of all those stimuli which are greater than our natural habits have accustomed us to; and that it particularly counteracts the ap proach of old age in emaciated

people with dry skins. The Doct. uses the term <u>old age</u> for the <u>debility</u> of age, and not the years which have passed over us.

Of the benefits to be derived from the warm bath I am fully persuaded and it is to be regretted that we do not, in erecting our houses, accommo date ourselves with convenient rooms and implements for this healthy and well as pleasant practice. Those who arrive at old age, must expect to partake of its debilities; but by due care the body and perhaps the mind may retain in some degree the facul ties of the middle age, until it has in fact been worn out. As respects my self, now in my 71st year, I feel a want of the sensorial power which I possessed in middle age, and it is with some difficulty I can keep up a suf ficient degree of warmth in cold wea ther; and during the fore part of the present summer, I found it

necessary to wear the same clothing that I did in the winter season to keep the body warm; and it was not until the hot season ar rived in the latter part of June, that I felt myself restored to a due degree of warmth. Since this I have perspired freely, thrown off a cover of a dead cuticle and once more feel a warmth with out winter clothing. Probably a proper use of the warm bath would have produced the same effects at an earlier season. Another effect of this warmth and perspi ration has been to relieve me from a cough and flow of mu cous from the lungs, which usually prevail in cold weather. A resi dence in a warmer climate, during the winter season, I believe would be promotive of my health. But as this is not within my power, I must submit to the fate of age in cold climates.

13. Singular Escape of an Officer In various tours over the country be tween Saratoga and the Lakes George and Champlain, I have taken pains to ascertain the places where many military events occurred in the war of 1755, as well as that of our revolution. In these researches I was must assisted by accounts given me by officers & men who served in the various cam paigns, and in some instances by inhabitants of the country, though rarely are there any to be found who were personally concerned in the events.

The following is an adventure of an officer, Major Seth Catlin of this town, who served in the cam paigns under Generals Abercrombie and Amherst, and was in the battle of Ticonderoga in 1758, then an Ensign. On the 28th of July 35 baggage wagons principally from Dutchess County in the State of Newyork, were ordered to

proceed from Fort Edward to Lake George under an escort: at that time the country was covered with woods excepting small openings about a few advanced posts on the road Ensign Catlin was ordered to march with the convoy, as the bearer of a letter from the commander at fort Edward to the commander at the Lake. Armed with a fusee⁷ and feeling con fident of security, he sat out some time before the waggons; and arriving on the low ground bordering on cold brook, between the present villages of Sandy hill and Glens falls, he es pied a raven feeding in the road, and determined to give him a shot, by carefully edging along the side of the road & thus keeping covered from him, by the thick bushes; but before he could gain the proper distance the game took flight and again settled in the road some distance a head. Making another effort for a shot, the bird again

⁷ Old term for flintlock rifle

avoided him, and once more settled in the road. In this manner he passed over the low ground and rose upon the plain beyond, vexed at the sagacity of the bird. By this time the convoy and waggons arrived at the place where he first started his game. In stantly the savage yell and a heavy discharge of musketry filled the woods from the side of the roads where he had just past, and havock and devastation followed. Comptily surprised, little resistance was made by the convoy, and the affair was soon over. According to the reports of the day 11,000 dollars in cash with the principal part of the baggage and 21 women accompanying it, were carried off or destroyed; the enemy are said to have numbered 600. Let the reader imagine the feelings of the Ensign at this moment; he saw the danger he had escaped, and that his life had been suspended by a brittle thread. The bird occupied no more of his attention

and by a rapid march he gained his destined post at the lake, probably with little inclination for another sporting bout.

This extraordinary escape was owing wholly to the knowledge the enemy had obtained of the march of the baggage: this being their prime object, they will know that an attempt to kill or capture the officer, would pro duce a shot, discover their ambus cade and defeat their design on the valuable baggage.

This officer was noted for his firmness, and was much esteemed by the British officers with whom he afterwards became acquainted, and particularly by the gallant major Small of the Scotch Highlanders. It is said that Genl. Amherst noticed him for his activity and perseverance in his various duties, particularly at the head of fatigue parties, and he often served on adventurous expeditions under

the noted partizan Major Robert Rogers, who commanded a corps of Ranger through out the war of 1755 called the French war. Retaining his loyalty to the British Government at the commencement of our revolution, he was precluded from serving in our army. Had he espoused the American cause and offered himself for service it is presumed he would have found an elevated military station office. But he was a true friend of his country and after the peace of 1783, was often called to im portant duties connected with his countries welfare. In quelling the Shays insurrection in this State he was very active, and his former military ex perience rendered him highly val uable. He possessed a generosity and nobleness of soul not always found in those who have been more elevated and good men generally esteemed him for his usefulness. He deserves our affectionate remembrance.

14. — A Journal of a Tour from Deer field to Baltimore, and Return by Rhode Island and Boston, in 1831; from a few memoranda taken during the tour.

Having been appointed a Delegate of an Antimasonic Convention, to be held at Baltimore on the 26th of September on the 21st of that month, I entered a stage at 1 o'clock in the morning (Wednesday) and by the way of Ash field, Cheshire, Lainesboro and Sand Lake, proceeded to Troy, and thence down the river to Albany, and put up at Lymans tavern for the night.

Tuesday 22d at 7 oclock AM embarked entered in a steam boat for the City of New York. where I arrived at 7 PM. Though I had often visited the Hudson above Albany and been at New-York, I was a stranger to the River between these two latter places these Cities.

For some distance below Albany the banks of the River are rather low.

‡ The most noted place we saw, was Hudson City on the left, Newburgh and New Windsor on the right. Many gentlemens seat are scattered along the banks, on elevations. Below west point we noticed Peaks kill a considerable place and many rendered interesting from the mile long events of the Revolution. Our rapidity, however, gave us but short views.

spreading into morasses; but the highland as we proceeded down the River the banks soon appeared the banks became steep and rocky and the land appears rather sterile. Now and then, where they recede, leaving recesses, villages and single houses appear on the margin of the River. In the south high lands are seen towering up their summits to great heights! At & about West point the mountains approach the river and present sublime views on each side. As our boat made but short stop at the point, I had no opportunity to view this place, so cel librated in our revolutionary History. At the entrance of Haverstraw Bay we past Stoney point on the west side, the place so gallantly stormed by Gen. Wayne in 1778. On which is a light house. Soon after passing the Tappan Sea, a wide expansion of the River, the evening approached and we lost sight of the interesting scenery which is said to exist on each side, towards

the City of New-York. After the bus tle of hunting looking up trunks, and em ploying parties to carry them to quarters we proceeded to [] nights lodging in Broadway. When we landed we had on board as I estimated them, about 300 passengers, many of whom came on board at various landings places on the river, not one of whom faces I recollected to have seen before. But on the passage I found means to introduce myself to several gentle men, who were delegates to the con vention from the states of Vermont and New-York Knowing that Mr. Barber of the former state was a dele gate I conjected that he might be on board and on inquiring for him I was informed he was one of our passengers, and he was immediately pointed out to me. On making myself known to him he intro duced me to several other delegates; after which I found warm friends to our cause

in abundance, all bound for Bal timore to attend the Convention. At that time masonry and its abetters were so hostile to antimasonry, that an introduction to a stranger, without first ascertaining his sentiments in relation to the contest, might have subjected me to a cold reception, if not abuse. Friday 23. Sailed from New-York for New Brunswick in New Jersey, touching at Elizabethtown point to take in passengers among whom were Mr. Vanderpool and Mr. Alling delegates from that state. Among the passengers I met with Col Burbank and there a delegate, from the County of Worcester in Massachusetts. The shores of Raritan river which was ascended are ex tensive marshes, filled with stacks of marsh hay, and the grass in many places from four to six feet high.

New Brunswick, at the head of naviga tion, is a place of note: but some parts of the town are rather low and & muddy, especially at the landing. The banks of the river here are elevated, and present a red soil & the rocks seem to be composed of red sand stone, of a deep hue, and the colored soil is found some distance on the road west of the town.

At this place ten carriages were waiting to receive us, in which we immediately proceeded westward for Trenton, and of course had no time to reconnoiter the place ren dered interesting from the operations of the American & British armies in our revolutionary war.

From New Brunswick to Prince

Ton [—] the Country is generally level and no places of note present themselves answer on the route on the route. Farms and straggling houses are seen, with a few small villages, and the land appears good well where it is properly cultivated.

The roads were rather effective and appeared to have been neglected by the inhabitants. At Princeton

the country assumed a different aspect; here the lands were in a high state of cultivation, and fenced into large fields indicating industry and econo my in the inhabitants. The village appears flourishing, and the Colleges present a handsome aspect, and I regretted that I could not [short time in viewing them and the adjacent field, rendered famous from the attack of Gen. Washingtons army on the British force stationed here in the winter of 1777. I however notice the ground where the action commenced, & when Gen. Mercer fell, which was in sight of the road. Gen Wilkinson's plans of this attack, I judged were good delineations of the topography of the place.

From Princeton to Trenton, distance about 10 miles, the ground becomes more uneven, but much of the same quality as that we had passed on the road to Princeton. Trenton was found to be a

handsome thicket cluster of houses; is the Capital of the State and appeared to be a place of business; but we had no time to give it an examination. which the operations of Washingtons Army in the winter of 1776 and 1777 rendered interesting to military men

At Trenton we took passage to Philadelphia in a steam boat, where we arrived at dusk in the early heat of the evening.

The passage down the Delaware afforded pleasing views was highly pleasing: the river expanding its broad surface much beyond any I had seen in New England, was as smooth as a mirror, and our boat glided along with the rapidity of a race horse; The country on each side was generally level as far as the eye could reach, presenting farms and scattering houses and few villages. Bristol on the right bank appeared like a little paradise; green leaves openings extending from the houses down to the

water's edge, fringed with weeping wil lows dipping their pendant limbs in the water, partially hiding the elegant buildings from the sight, is said to be a place of fashionable resort, especially in the summer season. Our boat, as if attracted by its beauties, by an easy curve touched a few minutes at the warf & took in passengers. The handsome town of Burlington on the Jersey shore next brought us to its wharf, where passengers were waiting our arrival. This place pre sents also a highly beautiful aspect and evinces great taste in its inhabit ants.

At dusk we reached the City of Penn, and as we glided along near the shore, the dark aspect of the continuous buildings was now & then broken through as we came in a line with the rectilineal streets extending to the west. Our landing was at Chesnut Street wharf, whence a part of the

Delegates proceeded to the Indian [] where we put for the night. In bringing our boat to the wharf a sudden change of its direction withdrew my attention from the points of compass, and I im mediately found my self imagination so invert ed as to imagine conceive the City to be situ ated on the Jersey shore: nor was it possible for me to remove the de caption until we had proceeded some distance down the River next morning; and what rendered the deception more extraordinary, was my acquaintance with City, where I had resided for some time, about 40 years ago.

Saturday 24 At an early hour we left Philadelphia in a steam boat for the Chesapeake & Delaware Canal. On this run we passed Redbank on the Jersey shore, and the ruins of Mud Island fort, places rendered famous in our revolutionary war; the

former for the repulse of Count Danop's Hessian detachment, and the latter for its brave defence against the British na val force in October 1777. Here I could have spent a few hours of interesting ram bles on the adjacent shores, in tracing the military operations of the American and British forces; but our furious boat forbid the indulgence and in a few minutes we lost sight of these interest ing places, and other scenery attracted our notice. On the right Wilmington in Delaware presented itself to our view on an elevated situation, be tween Brandywine and Christiana creeks. Its appearance was inviting & is said to be a place of business & a great resort for people of fashion in the warm season.

On our passage down the Delaware a gentleman on board proposed a col lection for the suffering Poles in Europe all hands were summoned below and a regular organization of President and Secretary of the meeting made. My militia

title being known, I was nominated and chose President, but I de cline the honor, with some doubts of the utility of the proposal; and another was chosen in my stead.

After the usual proceedings and voting by ays and noes, alamode the southerners, the contribution box was passed; and after suck marks of respect the General could not honorably refuse his mite. Like this the Poles received the [] our donation is not known.

On our arrival at the outlet of the Delaware & Chesapeake Canal, our trunks were put on board of horse boat and we were soon moving pleasantly on the canal, 13 ½ miles in length of a sufficient depth for light sea vessels. Part of the way we past along low ground embanked on one side, forming a considerable extent of water. We then extend the deep cut of 70 or 80 feet; over which is a bridge of

one Arch which saw suspended in the air, out a frightful elevation. The land bording on the canal pre sented a sterile appearance of worn out fields with very few houses, as if deserted by its inhabitants people. At the entrance of the canal into Chesapeake Bay, a few houses are found seen and have a steam boat for Baltimore was ready for our conveyance, and we were soon on board and under rapid motion down an arm of the bay, for that City. Entering the broad Chesapeake river view was extensive, but no large villages were in sight. A few rolling porpoises indicated that we were in salt water a steam boat filled with passengers passed us on her course to the landing we had left; the transit was as rapid as two comets in opposite directions, and the scintillations from the flues rendered the comparison very Ι apt.

I had anticipated a run of several hours, before reaching Baltimore, but in a short time we were up with north point, entered the Patapsco and Baltimore the City was soon in sight. Passing fort M. Henry on the left, we landed at the steam boat wharf, where the officious porters were ready to convey our trunks to quarters (5 oclock PM)

I took quarters at a boarding house in South Street, with a number of accompanying delegates. Many of the members from Massachu setts had previously arrived & taken quarters at Barnum's Hotel, at the corner of Market and Hanover Streets, near the Battle monument.

Sunday 25. By invitation I attend a Methodist Church and heard an address from one of the most elo quent orators. The discourse was divested of the common rant of preachers of this order in our part of the country, and the audience exhibited none of that enthusias tic zeal often observed at meetings of this sect. The preacher was a young man, said to be of extensive service, and much esteemed by the respectable part of community who were acquainted with his talents.

Monday 26. The delegates assembled at the salon of the Athenaeum and were called to order by Judge Burt of Orange County in New-York, and John Rutherford of New Jersey was placed in the Chair to preside at the organization of the convention. The votes for President being collected, John C Spencer of New-York (State) was found to be elected.

John Rutherford of New Jersey Jonathan Stowe of Ohio
Thomas Elder of Pennsylvania
John Bailey of Massachusetts
were the Vice Presidents

Benjamin F Hallett of Rhode Island Edward D Barber of Vermont, Sheldon C. Leavitt of Connecticut Caleb Emery of New Hamp the Secretaries. After transacting the business the Convention adjourned to 10 oclock the 27th. Tuesdayy 27, met according to adjournment. The Hon. Chief Justice Marshall of the supreme Court of the U. States who was at Baltimore, appeared in the Hall, in pursuance of an invi tation of the convention, and took a seat to attend the delib erations. Several Reports of Committees were made of a most important nature, among which was one by B.J. Hallett on the Masonic construction of Masonic Oaths or Penalties; another by the President John C. Spencer, con taining the History of the Judicial

proceedings had in the State of New-York to discover and punish the offenders concerned in the kidnapping and murder of William Morgan. The Hon. William Wirt of Baltimore was present during the reading of the above mentioned Reports Wednesday 28. The Convention met according to adjournment, at 9 oclock AM and proceeded to ballot for candidates of President and Vic President of the US, and of 111 votes William Wirt had 108 for Presidential Candidate, and Amos Ellmaher of Pennsylvania 108, out of 110 for candidate for Vice President. The two Gentlemen accepted the nomination by Letters commu nicated to the Convention. The Con vention continued in session, performed much other business of high import ance and late in the evening and adjourned sine die⁸ For a particular account of the

⁸ Latin for "without a day," meaning with adjourned with no appointed date for resumption.

proceedings of the Convention, and full Reports of the Committee and other papers, see the pam phlet stereotyped and published at Boston by a Committee, 1832. In the course of proceeding many able speeches we delivered and it is to regretted that they have not been preserved and given to the public as true expositions of the evils of masonry.

Previous to the meeting of the Convention, the Citizens of Balti more were generally much in the dark respecting the abduction and murder of Capt. Morgan even the profound Mr Wirt was but little informed on the subject. Finding the papers he perused silent, on the subject or rather disposed to ridicule the proceeding of antimasons and defend the institution of masonry he could not conceive that it

was fraught with the evils imparted it, by those who had examined its principles and practices. In his letter to the Convention he says "I had heard, indeed, the general rumor that Morgan had been kidnapped, and very probably murdered by masons, for divulging their secrets: but I supposed it to be the art of a few ignorant & ferocious desperadoes, moved by their own impulse singly, without the sanction or knowledge of the lodges: and thus think ing, I have repeatedly and continually both in conversation and letters of friendship spoken of masonry and antimasonry as a fitter subject for farce than tragedy, and have been grieved at seeing some of my friends involved in what appeared to me such a wild and bitter and unjust perse cution against so harmless an institu tion as freemasonry" And, he adds, "It was not until the period of your assembling here, that on the occasion

of a friendly visit from one of your members, and my taking the liberty to rally him on the excessive zeal which had been excited on an occasion so inadequate, that he placed before me a detail of of some of the proceedings on the trials of the con spirators against Morgan; when for the first time I saw the Masonic oaths as established by the testimo ny both of adhering and seceding masons on the trials in New-York" Thus by a fair and calm examina tion of the documents which had been established for truth, Mr Wirt was struck with deep conviction of the turpitude of masonry, and had the honesty to divulge his conviction in full. "If, says he, this be masonry as according to this uncontradicted evidence it seems to be, I have no hesitation in saying, that I consider it at war with the fundamental principles of the social compact, as treason against

society, and a wicked conspiracy against the laws of God and man, which ought to be put down." Yet, strange as it is, Still-there are men of high talents who remain under the same blindness descended by Mr Wirt, but have not the fairness of character he possessed, to examine the truth for themselves. To such we say, you may persist in your obstinacy and recap the fruits which must follow; but we will have no participation in your inconsistency. Few men however at this time, who regard purity of character, dare publicly to uphold the principles of the Masonic institution. But many remain silent, and thus give their aid in perpetrating what their good sense would condemn in any other institution. We envy not their happi ness, or standing in community. During the sitting of the Convention the news papers of Baltimore indulged in no severe asperity; but treated us

us with a degree of candor to which we had not been habituated in other places; some of which indeed expressed their surprise that so respectable a man as Mr. Wirt, should consent to be held up by such a party, as the antima sons. The names that have since appeared in our ranks, have silenced the severe vituperations which at first were common in most of the papers, and produced a bitter feeling towards us; and the only danger to our course is, that the outrages of masons may be forgotten by the rising gener ation, and thereby the institution be suffered to resusi tate and again depredate upon the rights of the people.

During my stay in Baltimore I exam ined various parts of the city, but want of time prevented me from giving it a thorough search what I saw satisfied me that it is a place of much business and enterprise, and I was favorably impressed towards the Citizens who appeared generally to

possess commendable habits and intelligent minds. A more minute acquaintance might however give a different impression. The Washington and Battle monuments evince that they possess public spirit, though I think they would have shown a better taste had the former been less elevated; The latter is very beautiful and com bines elegance with durability; it is intended to commemorate the men who fell in the actions with the British army in the late invasion under Gen. Ross—as we have many descriptions of the City minute notices are here unnecessary.

Thursday 29 Left Baltimore in a steamboat, and returned our former route, to Philadelphia, and took quarters at Congress Hall in ____ street north of Chesnut street.

Friday 30. Spent the day in Philadelphia in visiting various parts of the City, some of which I found

much improved since 1790, at which time I was in the place several days with a friend from Deerfield. Owing to a lameness from an old fractured leg my rambles were limited to Chesnut and a few adjacent streets The buildings appear more elegant and the streets more ornamented than at the time of my former visit, and they are carried out to quarter lengths in various di rections. The same regularity still prevails, and I could not but no tice the spacious side walks and ornamental trees seen in various parts. The long market building, in the street of that name, had much of its former appearance, appeared well stocked with every article of use and comfort I visited some of the most noted Bookstores to find rare publi cations Book printing is covered

on extensively in the City and works of almost every kind may be purchased at reasonable rates. In passing along the streets I noticed a remarkable calm ness and there appeared little of the bustle we find in New-York and Boston. Something of this is seen at Steam boat wharves on the arrival of the boats. Where there is necessarily a press of business. At the time of my former visit business steam navigation was unknown though some attempts had been made to introduce it. I recollect to have seen Ramsay's or Fitches boat here, worked by steam but the plan failed of success, and was given up, until Fulton constructed his boat at New-York; since which they have been put in successful operation in most parts of the civilized world; and the prediction of Dr. Darwin is fully verified— "Soon shall thy arm, unconquer'd steam! Afar Drag the slow barge, or drive the raped Cave."

Among the recent improvements of the City, the water works at Fair mount for supplying it with water may be mentioned. The water is raised from the Schuylkill by machinery into reservoirs, and then conveyed in tubes to all parts of the City, affording comfort and health to the inhabitants.

Philadelphia, in short, is an elegant City, and were I to select one for my residence, no one one that I have seen is more inviting. Saturday Oct 1. Left Philadelphia and proceeded to New-York in com pany of several of my brethren of the Convention, and took quarters at the American Hotel in Broadway. On the passage through Jersey we past a place a few miles easterly from Princeton called Rocky-Hill, the en campment of Gen. Washington's Army at the time he issued his farewell orders, at the close of the war. This I had passed on my outward tour

without knowing it to be the place pointed out to me on my return: the hill is not remarkable for elevation, but abounds in detached rocks, and presents open fields but no houses seen on the road. The following are the closing words of the Generals farewell at this place Oct 2d 1783, "And being now to conclude these his last public orders, to take his ultimate leave, in a short time, of the mili tary character, and to bid a final adue to the armies he has so long had the honor to command, he can only again offer in their behalf his recommendations to their grateful country, and his prayers to the God of Armies—May ample justice be done them here, and may the choicest of Heavens favors, both here and hereafter, attend those, who, under the divine aus pices, have secured innumerable blessings for others! With, their wishes and this benediction, the commander in chief is about to retire from service.—The cur tain of separation will soon be drawn

and the military scene to him will be closed forever."—This must have been an interesting scene, long remembered by the officers and soldiers of the Army; and in passing over the ground I could not avoid reflecting on the scene it, though not of the army. In the evening several of our anti Masonic friends of New York who had attended the convention as Delegates called at our quarters, among whom were Henry D. Ward and Henry Cothc al. Two of my companions were Wilheim Sprague and Walter Paine Jr of Rhode Island, genuine antimasons, who had been very active in the cause. Sunday 2. Attended meeting with Mr Ward;--sermon by Mr. Woodbridge formerly minister of Hadley, in which he attempted to reconcile the goodness of God with his creation of evil; a proposition generally deemed difficult. That God created evil is, in my mind a doubtful position. The day being fine, the side walks

of Broadway were thronged with people of all descriptions, Among them I noticed many blacks, male and female, generally well dressed and some of them most elegantly so, with watches in their pockets and fashionable walking canes, appearing to enjoy freedom and life, not less than the whites. How does such a sight strike upon a southern slave holder? These blacks I am informed, are generally industrious and procure a comfortable living in the City. Are they in fact an inferior race of beings, incapable of self manage ment and self government. Let them be educated and elevated from their depressed state—let them partake of the rights guaranteed by our free con stitutions, and the question of their capability would soon be solved. But our southern brethren are not willing to make the experiment. Broadway I think is the most ele gant part of the City; in front of our

Hotel is the park a handsome opening with grand walks, and the Battery at the southern extremity presents a similar appearance, both fine promenades, the latter much fre quented. The City is much enlarged since my visit to it in 1790, especially on the northern part. At that time very few buildings were seen in the northeasterly quarter beyond what was called the Manhattan wall. Now the City extends far much to the north of it, and many abrupt hills are leveled and their sites covered with buildings. As a place of mecan tile business New-York undoubted ly excels any other city within the U States, and probably will at length equal in magnitude London and Paris. But why are people so much disposed to immure them selves within the narrow streets & ponderous walls of our Cities? To me our Country villages present

charms, not to be found with in the continuous fronts walls and gigantic edifices of our populous places.

Monday 3. Being desirous of meeting the State Antimason Committee, which is to assemble at Boston this week, I resolved to proceed to that place by the route of Rhode Island. Calling at the Wards printing office, I found a number of our antimason friends among whom was Miron Holley of Lyons in the state of New-York, and several of the delega tion from Boston. Mr. Holley is well known as an elegant writer and has rendered much service to our cause by his able addresses delivered in that state; The address to the people of the United States adopted at the Convention at Balti more, was written by this gentleman and is an able document. Mr. Ward is the able author of several antimason works as well as the antimason Register, pub lished in Monthly numbers at New 1 mason was elevated York. He is a [to the third degree, and condemns the

system of masonry as antiChristian, anti Republican, and fraught with tremendous evils in our Country. He is a gentleman of science and literature and has been one of the faculty of a College in Ohio. Most of his works are in my family Library. At 4 oclock PM entered on board of the Steam boat Boston for Providence Rhode Island and sailed from New York with a load of passengers. Once more locomotive, our boat soon gains its speed; the various points on either shore are the proud City reced with the rapidity of a tornado. The narrow pass of Hurl Gate appears like a river just ahead. See the master at the wheel for he trusts no unskillful hand at this pass a small motion to starboard, then to the starbord and the obedient boat in quick gyrations easy curves glides along, shiming every danger at the will of the master like a well bitted horse; and within a few minutes we are in long Island

sound gliding triumphantly along the smooth surface of the water. Thus the skill of man by his knowledge of the laws of nature, triumphs over difficulties which the savage finds [1. To what perfection future generations may arrive none can tell. Had our fore Fathers who so long "trigged at the oar", and trimmed the sails to the wind, been told that their sons by the aid of fire and water, would navigate rivers and bays with scarcely the exertion of a muscle, they would have smiled at the prediction as the visionary ravings of a visionary enthusiast. Our view of the adjacent shores was short, for night soon enveloped us and the compass and distant light houses were our only Guides. The wind being gentle, little undulation of the boat was felt, and we anticipated a pleasant voyage. Many of the passen gers retired to the berths, while others remained on deck busily engaged in conversation on various subjects suited

to their tastes. The night being clear and our horizon extending embracing nearly a hemisphere, I amused myself with a view of the Constellations and known stars. Now and then a distant light house appeared. If ahead we soon brought it to bear on our beam; if first seen on the beam, we in a short time sunk it below the horizon. The sparks from the flue of the engine attracted my notice, when they were large it was pleasing to notice their curves through the air and their descent to the sur face of the water, where they seemed to rest sometime be fore they were extinguished. ‡ Wearied at length with observations and the over bearing cool, I returned to a birth where the stillness which prevailed, from the judicious regula tions of the of the (motor of the) boat invited to sleep. A few of the passengers however preferred a game at cards, to repose Towards the dawn of day I []

a considerable undulation of the boat, and an inquiry was informed, we were up <u>point Judith</u>, where the waves from the ocean rolled in towards the land, un obstructed.

At 5 oclock in the morning we arrived off Newport, and sent part of our pas sengers on shore; but owing to the darkness I had but an imperfect view of the place, which I much regretted Tuesday 4. Our boat had not pro ceded far up the bay, before a heavy fog induced our cautious master to come to anchor, to avoid some dangerous points or rocks, where we remained until the fog cleared away. The anchor was at length weighed and we were soon under our former speed and in a short time arrived at Providence and parted with our Rhode Island delegates.

The whole distance from New York to Providence is estimated at 186 miles; and the <u>time</u> to Newport (158 miles) was 13 hours. What a triumph of Art!

At Providence we found Carriages ready for our passage to Boston & were immediately seated, with out a minutes time for examining the place. I could not but regret such haste which was a severe tax on my curiosity, and any re marks on the place, other than that it appeared wealthy and flourishing would be improper. The distance from the City to Boston is about 40 miles, over a Country the soil which is not the most fertile, until we ap proach Boston, where good hus bandry has much improved it. We arrived at Boston a little past noon and found our Anti Masonic Committee assembled for the purpose of nominating candi dates for the offices of Governor & Lt. Gov ernor. John Q. Adams and Mr. Winthrop were nominated as the Candidates the first for Governor.

Wednesday 5 The Committee assembled at Merchants Hall and received a Letter from Mr. Adams, declining the nomina tion & being unwilling to be held up in opposition to Mr. Lincoln.

The ballots for another nomination being collected and counted, Samuel Lathrop of West Springfield was found to be chosen candidate for Governor, and I was appointed to convey the nomination to this to the voted pure patriot on my return to Deerfield. Spent the remainder of the day in Boston. Called at Mr Payne's the astronomer, and examined the Instru ments lately procured by the State for making our trigonometrical Survey. Among which is a Transit instrument, a Telescope and large Theodolite, made in London, all appeared to be well constructed; the Theodolite, though a good instrument for common accurate sur veying, I think, is not suitable for

nice geodesic operations, and has not been much used. An Instrument of another construction made, I believe, by the famous Trough ton, borrowed of the U. States, ad mitting of several <u>readings</u> and <u>repetition</u> of the observed angle. Our invention of <u>Borda</u>, has been preferred by our Engineer.

Would it not be well for the State to procure a <u>complete set</u> of Astronomical instruments, to be deposited in a suitable observatory in the care of a skillful astronomer, who should receive a moderate Sala ry, from the public chest? Such an establishment is much wanted & would be much more honorable to the State than may of our grants for unimportant objects. But the <u>necessity</u> of such an establishment is not seen by the unscientific part of community.

At Dr Phelps I met a Dr Brown

of Medford. A Royal Arch mason who acknowledged that Masons had killed Morgan and gone the "whole hog" He condemns the institution in all its parts.

Since viewing the city of Philadel phia, I could not cannot but notice the iregu larity and contracted width of the streets of Boston. Had the City been regularly laid out, for a large place, at the commencement of the building it would have been, not only more elegant, but more convenient. Many of its edifices are indeed as handsome as those of Philadelphia; but the tessel ated plan of the latter, will strike the eye of the observer, as much more beautiful than the former. The beauty ap pearance of the streets bordering on the common, are not however, inferior to the most elegant part of Philadelphia. In its grand plan, New-York is as de fective as that of Boston; but as its streets extend northward, they become

more regular, and present the reg ular aspect of Philadelphia. A view of our State house from the south, I think, is not excelled by any publick building I have seen; and its elevated situation gives it an advantage over most others. Boston is fast improving by the addition of buildings and new streets, and must necessarily be, as it has been, a place of great business; the facilities afforded by the construction of Rail Roads in various directions, will invite the principal part of the trade of New-England to this great mart. Thursday 6. Remained with my connections in Boston, waiting for the papers to be communicated to mr La throp. The nomination of Mr Wirt by the Baltimore Convention, excites some surprise among those here who are deter mined to remain blind to the attro cities and principles of masonry. Like him they have believed that the

institution was harmless, but <u>un</u> <u>like</u> him they refuse to examine the proof of its turpitude and guilt.

Mr. Wirt had incidentally heard the "run over" of the abduction and murder of Morgan by Masons, and he supposed it to have been the act of a few ignorant mem bers, without the sanction or know ledge of the lodges, and treated the affair with indifference; but he was not apprised of the facts, that many masons who had sustained a fair standing in the community, unequivocally jus tified the transaction, and aided in screening the perpetrators from punishment under the laws. If one so astute, and who was in the constant practice of reading the papers of the day, could be thus kept in the dark in relation to the horid affair is it strange that others of similar characters and employments, should be equally blinded? We do not so much wonder at this blindness, as

we do at the criminal neglect to obtain information of the at trocity. The apathy which so generally prevailed, on the first de velopment of the transactions, evin ces a recklessness wholly incon sistent with the duty and watch fullness necessary for sustaining re publicanism; and has created flaws in many, that owe liberty rests on a basis less firm than they had heretofore supposed.

We had looked to our intelligent men as guardians to our rights, and had supposed they would be the first to step forth to resist an encroachments upon them. But where we saw them sleeping on their posts, or giving the cry of "all is well" instead of sounding the alarm on the perpetuation of a mur der by a powerful midnight combination, affiliated by horrid oaths and bloody penal

ties, honest men were advanced, and this alarm was increased when it was seen that the criminal laws of a neighboring state were prostrated and trampled in the dirt by this same combination. Under this state of things could our professed patriots re main indifferent? Alas! to the deep disgrace of those republicans, this was the astounding fact.

To account for the conduct of these men on consistent principles, would be no easy task; but willing to afford all that candor can devise, we will mention a few circumstances in mit itgation of their singular course.

Associations of working or stone ma sons were known in England as early as Edward 3d and in 1350 an act of the government was passed regulating their labor and wages; and in 1424 another act was past, making it penal to hold their meetings. From this time, it seems, the associations were fell

soon fell into disrepute and were little known. Probably however, they continued to assemble in a pri vate manner. About the year 1717, the plan called Speculative Freemasonry consisting only of three degrees, but was not confined to mere laborers or stone ma sons, though the old emblems were continued. Well knowing the power of a secret body, many gentlemen joined the affiliated corps, and in the course of a few years lodges spread over various parts of Europe and the East Indies. In 1733 a lodge was established at Boston in this then Province of Massachusetts, and they have since extended over every part of the United States, even to almost every cluster of log houses on our fron tiers. His brief History is introduced to show the fallacy of the pretensions of the institution to great antiquity, as has been supposed by those who

have not examined its origin. Though the progress of masonry was rather slow previous to our revolution and was mostly limited to three de grees, it has since made rapid progress and many deemed respectable men have become members; but let it be remarked, that in most instances they entered to lodges at an early age, under the dazzling display of their glittering baubles, and empty pretentions to antiquity and sanctity. But perhaps nothing has effected ally blinded the public mind in regard to the design of the institution as the initiation of Genl. Washington and others of the respectable standing in our country, into the fraternity. The lullaby song that these men have been members of the institution, has been charted in all corners of our country, and the conclusion drawn, that it must therefore, be pure in its principles. But what was the masonry

of Washington and many others of his colleagues? When he was initiated the system consisted only of three degrees, and they differed in many particulars from those which now exist; and that he held them in low estimation, is evident from his state ment to the Rev. Mr. Snyder, in a letter dated August 25, 1798, in which he says, "I preside over no lodge, nor have I been in one, more than once or twice within the last thirty years, l back the date to 1763. If he ever, however an active member, it must have been during the French war of 1755. while connected with the British officers who served in this Country. With the higher degrees since intro duced, of French origin up to 50, or more, he was entirely ignorant; and this was the case with others of his time. Without an acquaintance with these facts, many on hearing the Masonic song that "Washington was

one of their brethren," embrace the opinion that the institution cannot be corrupt in its principles; and Mr. Wirt after having examined the oaths and ceremonies, as they now exist, comes to the conclusion, that this was not the masonry of Washington, and we readily adopt his conclusion.

To these eminent men, who have ascended the ladder to the higher de grees & still adhere to it we leave the difficult task of reconciling their consistency with duty and patriotism.

Another service of the delusion into which many of our leading men have been led, is the singular course pursued by the press in this Country. Relying on this service for information on important events, they found them silent on the subject of Morgans ab duction and murder; nor were the trials of the conspirators in the state of New-York allowed to appear in the columns of the

papers of the day: true indeed if at any time the subject of anti mason ry pressed upon them it was men tioned with ridicule and vitupera tion; and without the aid of a few free presses which dared to speak the truth, little or nothing, would have been heard by the people of the atrocities committed by masons, or the efforts of antimas sons to remove the bloody stain from our land, and restore the supremacy of the laws. Had other proofs been wanting, this alone would have demonstrated the monstrous power of masonry over the public mind. Another source of the delusion of our leading men was the party spirit which prevailed in the Country, respecting the policy of our government, and the men who were to be raised to plains of public trust and honor. Through the influence of masonry they were led to believe the contest with the fraternity

fraternity originated in a strife for office. This, though it indicated a want of discernment incompatible with enlightened men, was a fertile cause of the delusion. The excite ment got up when Capt. White was murdered at Salem, might with equal propriety have been attributed to similar motives, and the perpetrations of the bloody scene been suffered to escape with impunity.

But all these considerations
weigh but a feather in mitigation
of the conduct of our heretofore deigned
patriots. The History of the Jesuits
ought to have taught them, that
secret societies were liable to corup
tions. This society originated with
men professing to be Christians &
for a long time it was viewed
by the public as harmless at length the scheme
became of the corrupt kind,
and several murders were undoubt
edly committed by its members; but
even at that time there was virtue enough

in the government of Europe to put them down and abolish the institution. And it is paying us but a degrading compliment to say that we, in this "enlightened age" act with less energy. On the whole the conduct of the men to whom I have alluded, has been of such a suspicious nature as to shake the faith of the community in the rectitude of their intentions, and taught them the truth of the adage, that great men are not always wise. The impression on my mind is, that the country possesses much less virtue & patriotism than I had once supposed, and that the people may be led into errors which may prove destruc tive to our rights and liberties.

The evidence which is now embraced in various publications, of the proof of the murderous principles of the Masonic fraternity, & of the knowledge of the high Masonic offices in [] of [] all parts of

Morgan, and little short of demonstra tion; and he who still doubts the facts lacks common discernment must be branded with an obstinacy, disgraceful in an enlightened community. In the latter case we leave them to the full enjoyment of their enviable situation. Friday 7. Left Boston and pro ceded to Springfield by the route of Worcester and Brookfield, and in the evening past over to West Springfield, to to communicate the Mr. Lothrop his nomination for the office of Governor, and unfortunately found him absent on business in a distant town. Left the papers with his family, and returned to Springfield. Saturday 8. Proceeded to Deerfield and found my family as well as usual.

the U States have of the designs against

Remarks & Reflections

My tour was pleasant and gave me an opportunity to review places I had I had passed

over in my younger days, and to view many others which I had not seen—viz Delaware Maryland and Rhode Island. The Country appeared prosperous in almost every part; and if we are true to ourselves if we cherish and support our Constitutions and the suprema cy of the laws—foster the arts sciences and our primary schools preserve the Union of the States and avoid the corruptions concome tant to our grown riches, we may, under the blessings of God, become a great, prosperous and happy na tion.

In my various tours, besides my na native State, Massachusetts, I have visited Maine, New-Hampshire, Vermont, Rhode Island, New York, Ohio, Pennsylvania New Jersey Delaware and Maryland; also the British Provinces of New-Brunswick and Upper Canada. in all which I have found, respectable

people, and kind treatment. In fron tier settlements I have found the greatest variety of character, and those who partook of the wildness of their woods; but by conciliating conduct, I have always found them ready & willing to bestow reasonable favors, and in no instance been ill treated, even when I have greatly opposed their prejudices or endeavored to correct their errors. I have sometimes been in quired of, why I had not become a member of the Masonic society, which I was assured would be of great benefit in traveling. My answer has been, that I could see no inducement to this step, until its principles were explained to me; that if it contained any thing useful to men it should not be kept secret; that if it embraced the arts and sciences, as was sometimes pretended, I had already fee access to them, without coming under the obligation of secrecy. The

sword of the tyler at the door of the lodge; its pretention to profound wisdom which must be kept under the veil- the violence exhibited by its members when the purity of its principles are called in ques tion;--its windy titles and claims to antiquity, embracing the solomans, Hirams and Johns of Scripture;its display of trinkets, "that a well informed savage would blush to wear";the little science and literature of many of its members, and the indiffer ence with which the more informed] to treat it—and the asperity with which it assailed by Doctors Robins son, and Morse & others for their attack on Illuminatism: All these, and many others that might be mentioned, have raised my suspicions of the purity of masonry, and kept me from a desire to be initiated into its secret mysteries.

The bubble has at length burst

its inmost recesses are laid open, and instead of any thing useful to man it is found to be filled with "dead mens bones" and its principles and ceremonies fraught with all the evils imputed to it, by its most suspicious opposers. Let it sink to everlast ing contempt, and no more prowl upon the rights of an honest, and unsuspecting community.

Note A. (See page 82)

The application of the steam Engine to navigation is a wonderful im provement, and now affords fa cilities for transportation on our rivers and the waters of the sea coast, the advantages of which can hardly be calculated. Though liable to fatal accidents by the bursting of its boilers, it is believed that by im provements these will become less frequent, if not entirely removed. It's great importance will induce

our

our mechanical philosophers to try every invention to remedy this difficulty & when it shall be effected they will add much to the value of the engine. In its present state, with good materials & care, considerable safety has been attained. The boat in which we are made our passage through the sound I am informed has at no time met with an acci dent of a serious nature. Much no doubt is due to the master, who is said to be a careful manager; and no other ought to be employed where the lives of so many people are con cerned. The horrors attending an ex plosion can hardly be described as con ceived; it is not less fatal then the discharge of a magazine of gun powder from a mine in the attack of a fortification where a large body is engaged, and perhaps, in some instances, is more destructive. This liability of the steam boat cannot but abate the pleasure of a voyage,

in all who are conscious of the dan ger; yet hundreds of passengers in every boat seem to be as much uncon cerned as if they were passing over a smooth road, in a carriage to which they have long been accustomed. This is the nature of man, and perhaps it is well that it is so. A more cau tious disposition might prevent a laudable spirit of adventure, which has its advantages. Had Columbus possessed this cautious disposition America might have remained undis covered until a much later peri od; and with the same disposition our adventurous circumnavigations would not have discovered the nu merous Islands of Polynesia & brought our Geography to its present perfection. But if these considerations will stimulate seamen to adventurous exploits, they will hardly render landsmen willing to be scalded to death or blown into attoms by the explosion of a steamboiler

The use of steam in navigation is the result of a long use of the engine in Europe. So long ago is 1663 it is said the Marquess of Worcester constructed an imperfect engine of this kind; but it is to modern times we are indebted to its application to the arts. In its early use, it was worked by expansion of the steam and atmospheric pressure. but at length what is called high pressure engines, were bought into use; in these the elastic force of the steam, works the engine without the aid of atmospheric pressure. But it was some time after this invention that it was so improved as to give a rotator motion. To Mr. Savony, Newcomen, Cawley, Boulton, and Watt, we are indebted for many improvements in the steam engine; but it was some time before the latter introduced the rotator motion. In 1778 Mr Washborough of Bristol in England, took out a patent for and engine which embraced this

improvement since which others have introduced improvements which have brought their engine to consid able perfections ‡ But it was left to our Countryman Fulton to apply this power to Navigation, and the first successful experiment was made by him on the Hudson, in 1807. His boat called the Claremont ran up the river from the City of New York to Albany, a distance of 150 miles, within 32 hours, and back in 30, in both trips against a light barge, a velocity much less than that of the recently constructed boats possess The first appearance of this boat on the river, excited much surprise; To some who saw had indistinctly seen her passing in the night (says Mr Colden) she appeared as a monster moving on the waters, defying the winds and tides, and breathing flames and smoke (See his "life of Fulton") not a very inapt simile.

The invention has, at this time, extended to most part of the scien tific world, and recently one of these boats, has been put in operation on the Danube, in the Turkish Dominions.

In an address delivered before the New-York Historical Society by Gonverneur Morris, in 1816, alluding to Fulton and his associate Livings ton and their invention improvement, he said: "This invention is spreading fast in the civilized world; and though excluded from Russia, will one long be extended to that vast em pire. A bird hatched on the Hud son will soon people the floods of the Wolga, and cygnets descended from an American Swan glide along the surface of the Caspian Sea. Then the hoary genius of Asia, high throwned on the peaks of Caucasus, his most eye glisten ing while it glances over the

ruins of Babylon, Persepolis, Jeru salem, and Palmyra shall bow with the grateful reverence to the inventive spirit of this western world."

15 <u>The Cultivator</u>: a Monthly Pub lication devoted to Agriculture, by the New-York Agricultural Society, conducted by J. Buel; terms 50 cents per annum, paid in Advance, each No. 16 pages, from the Steam Press of Pack ard & Van Bunthingsen of Albany.

We have perused a few numbers of this work, of the 3d Vol. and think it very valuable, not only for farmers, but for all others who are friends of improvement.

Amongst the useful matter we have noticed in these numbers, the recommendations, in the 5th, of the 3d Vol. respecting the planting of trees, an old farms and prairies, and the cultivation of Beets for Sugar, are

important. In all old counties the want of timber not only for building, but for fuel is a serious evil, and though our Country at present, does not fuel the inconve nience, in a high degree, the time is not distant when we shall be in event of this article; and when coal is not found, as in New England, the difficulty of procuring fuel will be great. If it can be supplied from the abundant coal beds of Pennsylvania and other distant places, the price will necessarily be great, and beyond the abili ties of the poor. By planting trees extensively on our old fields, the difficulty would in a great degree be obviated. This is now extensively practiced in England, and the arti cle to which we have alluded, (on the 3d number of the cultivator) states, that that in 27 years the Duke of Bedford along, has planted

upon his estate (1540 acres of ground) with 5,735,000 trees, exclusive of 600 bush els of Acorns and other seeds put in with the dibble. On the Prairies of the west this planting of trees is recommended, as one of the first objects that should engage the attention of the settler.

In New England where stone is plenty, and bricks may be manufactured to great extent, these articles will probably be substituted for timber; yet this will still be necessary in all edifices as well as for fuel; and its importance in ship building is obvious.

The manufacture of sugar from beets, I think, deserves attention. This article has in fact become a <u>necessa</u> <u>ry</u> one; and the increasing demand for it, both in Europe and America, renders an increase if it necessary as the supply from the west Indies will at length be found insufficient.

In France this manufacture is now,

it appears carried on to considerable extent, and it is said samples of the sugar are seen in that country, equal to the finest loaf at 9 cents per pound. The process may be found detailed in Chaptal's "Chemistry applied to ag riculture".

Beets may be cultivated to any extent, on our alluvial soils, and others well manured; and I see not why a supply of sugar may not be obtained equal to the wants of our people. Much has been said of late concerning the raising of silk, and encouragement for this purpose is held out by our Legislature, by the grant of premiums. But as this arti cle is in fact a superfluity, which I think cannot be justly said of su gar, it appears that encouragement for manufacturing it from Beets is of much greater importance, than that for the manufacture of silk.

To Mr Thomas G. Fessenden, who has

for several years afforded a most valu able publication, the New England Farmer, from his press in Boston similar to the Cultivator, the public are greatly indebted—a comparison of the writings of the two works might be deemed invidious; both are excellent and deserve the patronage of the public. The former may be had in bound volumes, and ought to be in the hands of all intelligent farmers. The latter, I am informed, may be had in the same form, and should be on the shelf with the Farmer.

16. Fourth of July Anniversary.

This has been celebrated in several of the towns in Massachusetts this year—addresses delivered and numer ous toasts given. To these we have no objection, provided they are in tended to keep alive a <u>true spirit</u> of liberty. But it may be remarked that this is not always the case.

When political parties are found, they generally make use of this Anni versary to further their views; and they are not always criteria by which we can judge of public feeling. the parade and show attending them, no doubt, has an effect, and this may be right or wrong, according to the intention of the leaders. Where the people are falling into an apathy, or too much absorbed in pursuits which tend to render them blind to their welfare, they may be useful to rouse the unthinking to a sense of the importance of their privileges. But the stimulus thus created is gen erally of short duration, and lasts only for an election or two. The fact is the people will not continue to act vigorously in any case when pecuniary advantage is not the result; and here we may be in danger of becoming careless to the watchful ears vigilance found necessary in

republican governments. In the recent assemblies of the people, exertions have been made to render the Jackson system of policy popular, and to change the administration in Massachusetts. Complaints are made against Gov Everett for some appointments he has made, particularly by Antimasons, and the Jackson party seize on this, to enlist them into their ranks, probably without much sym pathy for their cause. Many of this party are masons, or those who have supported masonry, and from these no great aid is to expected. Let antimasons then, act with caution, and not suffer themselves to be misled by practices artfully concealed. As respects some of the appointments made by Gov. Everett I have been a little startled, but perhaps the influence of the pow er placed over him by the Legislature I mean the Council, may explain his conduct, without the supposition that he has abandoned his antimasonic

principles, so finely developed before his election, One circumstance it must be admitted, bears an unfavorable as put: his appoint ments have been such as to meet the routine approbation of some of the most inveterate adhering masons in Boston who previous to his elevation to the office of Governor were his violent opposers, and denounced him with severe vituperations. I shall however, be slower in embracing the opinion that he has become an enemy to Antimasonry.

Among the <u>toasts</u> given, I notice, sev eral touching the militia which in dicate little knowledge of the sub ject. In the Weymouth celebration the following is found in the list of the <u>regular toasts</u>.

"12. The militia. Citizen soldiers; the only safe defenders of a Republic; he who would disarm such a soldiering, thereby making a large standing army necessary ry, only paves the way for military

despotism."—The importance of a militia in our republic, we all acknowledge, but differ about the form. Those only who are for continuing the old infficent system of training the whole of the unrolled men, are in my opinion the real enemies of a militia though they may not know it.

At the Democratic celebration at <u>Boston</u> we find the following.

"The Militia—Coveted and praised in time of danger-neglected and ridiculed when it is over"

By whom is the militia coveted in time of danger? Not by experienced offi cers, they will know their inefficiency-Not by Washington, who after a trial of them in the filed, said "I solemnly declare I never was witness to a single instance that can countenance an opinion of militia or raw troops, being fit for the business of fighting (See his Letter to the Governors of the States, page 18) If it is "neglected & ridiculed," it is by those

who have witnessed its fallacy by long observation, and are endeavor ing to new moddle it and divest it of its "cumberous machinery", which Secretary Cass says, "creates expense and trouble, and which while it promises little, performs still less" (See page 23)

The Milford celebration at Milford presents the following among the regular toasts.

"The militia-Forgotten by Congress; neglected by the State Legislatures; dis courage by the public opinion. It owes its existence to the public spirit of its friends"

The forgetfulness of Congress cannot be too severely censured; to them belongs the power and duty of organizing arming and <u>providing</u> for the discip line of the militia, and their neg lect is astonishing. At the late session a Bill was introduced, imperfect indeed, but nothing done, and

until that body shall provide a better system, it is in vain for the states to at tempt an efficient one. The "neglect" of the states is an unjust charge. In Mas sachusetts this is far from the case. While relieving the militia from the useless parades of Regiment, its Legislature has provided, encouragement to the light corps, by a reasonable com pensation for their services, of the light corps and when this plan shall be carried out, and the men trained in the field a number of days annually and paid and subsisted when in the field by the gov ernment, an efficient force will be prepared, and all that can be done by the state will be performed. If the militia ever was respectable, it owed that quality to the "public spir it of its friends", and not to the govern ment, and this alone carried death in to the system, and will for the future, if persisted in, forever rend er it of little value. At

At the <u>Scituate</u> celebration we find this toast in its regular list.

9. <u>The militia-The only safe guard to republican governments.</u> When rendered unpopular by <u>popular frenzy</u>, a standing army will supply its place and rivet the chains of des potism."

Friendly as I am to a militia, I had sup posed that it was not the only safe guard to our republic; a navy it appears to me is one of the ingredients, added to a small standing force for garrison duties. But if a militia is the real "safe guard" of a republic, let me say to the gentle men met at Scituate, that they can not consistently withhold their immediate aid in establishing a system which shall preclude a standing army; and that if it is their design to continue the former one, which was supported by individ ual instead of governmental effort, and has become unpopular from the experi ence of the populace, then indeed, we

may be driven to the necessity of a standing army. The remedy as I have often suggested is easy and obvious to all who will examine the subject. Let Congress adopt a plan that shall arm all able bodied men of a suitable age, and from these form an elite corps of say 100,000, which shall be proper ly organized, trained in the field annu ally in small bodies, a sufficient number of days to give them instruction in Camp duties, and paid and subsisted by go ernment; then we shall be prepared for any emergency, and no longer be smiled at for once by the nations of Europe, for our boasts and "popular frenzy" concerning our national de fence. We may continue our old sys tem and rest in fancied security and thus invite the cupidity of the nations of Europe; but rely on it, that the tug of war with any powerful great military nation, would cure us of our present insanity, and open our eyes to our danger.

17 Death of Solomon Williams July 26th 1836.

Mr. Williams was the last of the family of Dr. Thomas Williams of this town, and was a respectable inhabitant, He was an industrious farmer and well educated for one of his profession, and not below his Brethren in point of natural talent, all of whom have been respectable. His reading was extensive, particularly in mode dern History. Bred in the old school he was not enthusiastically found of all the new schemes of modern times, and doubted the utility of some which are, by many, supposed to be im provements. His discernment and judgment on subjects to which he had attended, were sound and discriminating; and all liberal men who knew him hold him in esteem. He had passed the age 71 years, and left a respectable family of 6 sons, and a wife.

Magnet: a singular Fact asserted. In a German periodical publication for 1797, it is said that a person having an artificial magnet suspended it from a wall of his study, with a piece of iron adhering to it, remarked, for several years, that the flies in the room, though they fre quently placed themselves on other iron Articles, never settled upon the artificial magnet. Cavallo's Philosophy 2 Vol 286 p.

On trying the experiment with a horse shoe magnet, I find that our American house flies show no aversion to resting on the magnet whenever it comes in their way, even on the points of maximum attraction and repulsion. Had the German experiment proved correct, we might have supposed the body of the fly to be ferruginous and operated upon by the magnet like such bodies. But in that case the fly would be attracted to the magnet rather than re pelled. Animal magnetism then has no ef fect on the fly. Germany, it has been said

is fertile in mysticism, and there Animal magnetism, we are informed, had its adherents some time much after the time Mesmer's system was scouted from France. The person who no ticed the effect of the magnet on flies as men tioned by Cavallo probably was a convert to the pretended science. Mes mer was German and he commenced his fanciful theory there, in about 1777 or 1778 about the time the German noticed the phenomenon of the flies. Some efforts, it is said, are now making to revive animal magnetism in this Country. We hear of its wonders in a Boston publication of recent date. With Phrenology it may amuse us for a short time and then disappear, & give place for something equally absurd.

"Developments, thus manufactured Caused many a thick skull to be featured, But pity well deserves defiance Wher ever she thwart, the march of Science"

⁹ From Thomas Green Fessenden's *Terrible Tractoration*.

19 Burritts Geography of the Heavens. Mr. Lincoln the Preceptor of our Academy put this work into my hands for exam ination, and I have perused with great satisfaction. It consists of eight well engraved plates with an accompanying Vol 12 mo 3d edition Hartford 1836. It is superior to Green's Astronomical Ruminations, though somewhat similar in its plan. Mr. Burritt's plates are so contrived as to point out the time when any star culminates, and a considerable number of Constellations are found on each plate, two of which show the circum polar, and four others, the Stars between them. The 7th is a delineation of the Heav ens on the principles of Mercator's pro jection, in which the monsters are rep resented by dotted lines spaces. The 1st plate contains a plan of the Solar System upon a large scale, with the inclination of the planets orbits and the relative sizes &c. in a very perspicuous manner The plates are perhaps as convenient a

a celestial Globe.

Part 2d of the <u>Book</u> contains a short treatise of Astronomy, including not only descriptive but many useful problems in its practice, and several useful tables. The work contains an Introduction written expressly for it the work by Dr. Dick of Scotland who it seems had perused some of the former editions.

The Book begins with the Consellation of Andromeda containing 66 visible stars of the 2d and 3d magnitude, one of which is named alpheratz¹⁰. This star's position should be well fixed in the mind. says Mr. Burritt, because it is but 1 min ute west of the great equinoctial colure or first meridian of the heavens, and forms nearly a right line, with Algenib in the wing of Pegasus, 14°S, of it, and beta in Cassiopeia, 30° N of it. If a line connecting their 3 Stars, be produced, it will terminate in the pole. These 3 guides in connexion with the north pole

 $^{\rm 10}$ Also known as Alpha Andromedae, the brightest star in the constellation Andromeda.

pole star point out to astronomers, the position of the great circle in the Heavens from which the Right Ascension of all the heavenly bodies is measured. Caph, or Beta, in Cassiopeia is almost exactly in the equinoctial colure, 30° N of Alpheratz, with which and the north pole star, it forms a straight line. Caph is on the meridian the 10th of November. It is the western star of the bright cluster. Shedir, or Alpha in the breast, is the upper star of the 5 bright ones, and 5° S.E. of Caph: the other 3 bright stars, forming the chair, are easily distinguished, as they meet the eye at the first glance. Caph is used in connexion with observa tions on the polar star, for determining the Lat. and variation of the needle. This star is in the colure which passes through the vernal equinox, and Megrez, in Ursa Major, is in that which passes through the autumnal equinox. Caph and megrez are almost opposite to each other, or on opposite sides of the N. pole and equally

distant from it. In <u>my</u> observations for ascertaining the variation of the needle, by circumpolar stars, I have used <u>Alioth</u> in Ursa Major, and <u>Gamma</u> in Cassiopeia; but then, or any two circumpolar stars, whose R.A. differ 180° will culminate when on a line perpendicular to the horizon.

The uncouth figures with which the ancients have marked out the heavens, appear to me to be rude, barbarous and perplexing‡ Sir john Herschel says "The Constellations seem to have been almost purposely named and delineated to cause as much confusion and incon veniences as possible. Immeasurable snakes] through long and contorted areas of the heavens, where no memory can follow them; bears, lions and fishes, large and small, norther & southern, confuse all nomenclature &c. A better system of constellations might have been a material help as an artifi cial memory." But the system having

obtained a currency, like most old things, is difficult to set wholly aside. I think however, that some of the <u>tails of the snakes</u> might be cut off, and the stars in them annexed to contiguous constellations. Take for instance, the <u>Hydra</u>, whose head embraces stars about 8 hours of RA & the tail of nearly 15 hours=105 degrees, and who can readily point out such stars as belonging to this constellation. Where the constellation is compact, or of no great, and a name for the clus ter is convenient for experience.

In his <u>Problems</u>, Mr Burritt exhibits the facility with which astronomical calculations are made by <u>Logarithms</u>. This to find the distance of any planet from the sun, that of the Earth being known, The <u>Rule is</u>: Divide the square of the planets sidereal revolution round the sun, by the square of the Earths sidereal revolution; and multiply the cube root of the quotient by the Earths

mean

mean distance from the sun. <u>Ex.</u> Required Mercury's mean distance from the sun, that of the Earth being

95,273,869 miles.

Mercury's sidereal revolution=87,969,258 days=7600543", 8912. Earth's sidereal revolution=365,256374417 days= 31558151",5. Then 31558151,5²=995916962096 952,25, and 7600543,8912²=57768267575827,21 (nearly) The last square divided by the first give for the quotient 0,052005106713292, the cube root of which is 0,3870977 and this X94.881.891= 36727607 miles for Mercury's distance from sun.

By Logarithms

Rule From twice the Log. of the planets sidereal revolution, subtract twice the Log. of the Earth's sidereal revolution, and to one third of the remainder, add the Log. of the Earth's mean distance from the sun. Thus Mer. sid. revolution 7600543",9=Log. 6,8808447. Then 6,8808447 x 2=13,7616894 Earth's Sid. Rev. 31558151"= Log. 7,4991302 and twice this Log. x 2= 14,9982604: diff= -2,7634290

then

then $\frac{-2,734290}{3}$ = 1,5878097. To then add Log. Earths mean distance 7,9789738=7,5667835= Mercury's mean distance 36.880422, miles. Note The Logarithm worked according to the given rules. We have made one of Mr. Burritt's numbers, without examining their correctness. He remarks, "The pupil need not think himself a dull scholar, if by the former method he comes to the result in <u>five</u> hours; nor re markably quick, if by the latter he comes to it in <u>five</u> minutes."

In some of the <u>Tables</u>, at the end, we notice a want of the designations of the declinations into N & S—always necessary.

20. To convert <u>degrees</u> and <u>time</u> mutually in to each other

1<u>Rule</u> multiply the given time by 15, carrying at 60 in the different denomina tions; multiply successively by 3 & 5. Ex. Reduce 3^h 48^m12^s to degrees &c.

$$\frac{\begin{array}{r}
x \ 5 \\
19 - 1 - 0 \\
\underline{x \ 3}
\end{array}$$
Degrees 57 - 3° 0"

To convert degrees &c. into time

2 Rule

2 <u>Rule</u> Multiply the degrees &c by 4. reckoning the seconds <u>thirds</u>; the minutes <u>second</u> and the degrees <u>minutes</u>; conveying as in the 1st Rule.

Ex. Reduce 56°-13'-12" to hours minutes &c.

Hours $3^{h}44^{m}52^{s}48^{thirds}$

When Tables are not at hand these rules are very convenient. See <u>Edin. Ency.</u>
Art Navigation. Vol 14, page 219. Burritt's methods are less facile. See his work, p. 150
See Tables, Fergusons Astronomy Vol. p. 157 & 158

21 Axioms

These are self evident truths and con sidered the foundation of Geometrical reasoning. But in works on geom. etry we often find them far from being self evident. In the treatise on this science in the Library of useful knowledge, among others we find the following.

9. If there be two magnitudes, and a third, and if one of them exceed the third by as much as the other falls short of it; the two together

shall be double of the third magnitude.

This though a mathematical truth, hardly comes under the name of an axiom. It is rather a theorem that requires a train of thinking.

If to some minds it is self evident, by most men, I believe, it is not at first perceived. Something like the following seems necessary for seeing the truth of the Axiom.

Let $10 = 1^{st}$ magnitude

6 = 3d mag.

2 = 2d mag. (which must be the result of the supposition)

Then 10-4=+4

6-2=-4

And $10 + 2 = 12 = 6 \times 2$, or double of the 3d magnitude.

But this cannot be called a self evi dent truth, like "the whole is equal to its parts; or things equal to one and the same thing, are equal to one and the same thing, are equal to one another &c. The true postulate is more appropriately The treatise on Geometry, in the Library of useful knowledge, is a good one, the diagrams being placed immediately un der the propositions, render the refer ences easy, and their arrangement is natural and well connected. The order of the propositions differ from Euclid, but reformers are gener ally made to them. The arrangement of the prepositions are as follows. 1 The enumeration, delivering what is

- 1 The <u>enumeration</u>, delivering what is to be done.
- 2. The <u>construction</u>, inserting the lines necessary thereto.
- 3. The <u>demonstration</u>, or course of reasoning: And
- 4. The <u>conclusion</u>, asserting that the thing required has been proved or done.

The <u>Appendix</u> to the Treatise con tains propositions relating to projec tions of lines are planes of various kinds, which afford assistance to draughtsmen and artists, and such as are laid down and some works under <u>Descriptive Geometry</u>.

22 Shooting Stars

Various hypothesis have been advanced to account for this phenomenon, but none satisfying. In several instances where these coruscations have descended to the earth a gelatinous matter substance has been found, indicating that they proceeded from a phosphorescent substance supposed to be, in some way, collected in the atmosphere But to account for the collection of this matter in the air is difficult. Some observers are of opinion that where the coruscations are seen in great abundance they are periodical. In the remarka ble case which occurred November 13, 1833, and which was seen over a great ex tent of Country in the United States, and other places, the fall of those stars excited the wonder of the people; the whole at mosphere appeared to be on fire. Professor Olmsted of Yale College, who has attended to the subject, advances the following hypothesis to explain the phenomenon viz. "The meteors emanated

from a nebulous body, which was then pursuing its way along with the Earth around the sun; that this body continues to revolve round the sun, in an elliptical orbit-but little inclined to the plane of the ecliptic, and having its aphelion near the orbit of the Earth; and finally, that the body has a period of nearly six months, and that its perihelion is a little below the orbit of Mercury." This hypothesis, or theory, seems to be strengthened by the fact, that the most remarkable phenomena of this kind, have occurred in the two op posite months of April & November. But whether it will ultimately be established, time and observation along can determine. If such a neb ulous body does in fact exist, would it not, when it comes within the Earth's attraction, be wholly drawn off from its orbit, and fall upon the earth?

23 English Reviews

Two of these (Edinburgh for April, and the London Quarterly for the same month) have just come to hand.

In the latter we find a review of Capt
Banks' Journal of the Arctic Land Expe
dition to the mouth of the Great-Fish
River, and along the arctic ocean, in
the years 1833, 1834, & 1835—one Vol. 8vo.
many beautiful prints and said to embellish the work, and it is spoken of in terms of high commendation.

The Capt and his party, of about 25, suf fered hardships and deprivation, as severe as could be born—sometimes almost without provisions, and driven to the last resource of devouring their own shoes and leather gun cases. On the 25th April 1834 the Capt. received the intelligence of the return of Capt. Ross & his party to England. Banks party then proceeded down a River to the arctic ocean to the lat. 67°-11' and Long. 94°-30' W. They afterwards proceeded to a point of Land in Lat 68-10- Long 96°-20' which

which they named <u>Point Richardson</u>. To Ross's obelisk (Lat 69°,31'—Long 99°-7') the bearing was therefore, N52°W-distant 86 English miles. By observations with good needles, the line of variation taken at Back's extreme point, passes a little to the east ward of Capt James Ross's magnetic pole. The Country bordering on the Arctic sea about <u>Back's</u> river, is represented to be composed of mountainous ridges of granite, porphyry, and slaty grass, with sandy barrens strewed over with large granite boulders, and without timber. The In dians miserable in the extreme; often dying for want of subsistence.

In the same Number we find a Review of the <u>History of the war in the Peninsula and the South of France from 1807 to 1814.</u> By Col. W.F.D. Neupier. 4 Vols 8 vo.

This review is a protracted one, ocu pying 48 pages, in which the Colonel is charged with a partiality to the French, and an unjust hostility to the Spanish Nation. The work is said to be "a specimen of the true French military school embracing not a thought for the justice of the war—not a con sideration of the damnable and dam ing inequity of the French invasion." As a work for military men it may be valuable, but this does not appear from the review, as it contains little in relation to battles, and strategic operations in the field.

The memoirs of the Life of Sir Humpfry Davy. By his Brother John Davy M.D. 2 Vol 8 vo. London 1836, in the Edinburgh Review, is an interesting article.

Geology considered with Reference to Natural Theology- By the Rev. Wm. Beach land D.D. and Professor of Geology in the University of Oxford, 1 Vol 8 vo. with a Vol. of plates-1836, in the London Quar terly, contains much matter for the Geologist. In a former work by this author (Reliquia Delivianae) he

embraced the opinion that the gravel which covers a large portion of the Northern hemisphere, and the curious cave deposits of the same tracts were evidence of the Mosaic Deluge. Further investigations have satisfied the au thor that the opinion is utterably unten able, and he quietly renounces it in in the present work.

Our knowledge of Professor Buck land's Reliquiae Diluvianae, has been limited to an extended review of it in Silliman's Journal, Vol. 8, But though we were ready to acknowledge that the work was ingenious and the result of much research, we could not perceive that the Professor's opinions were strongly supported, even admitting his premises; and that a man of his science should write & publish a 4 to Vol. of 303 pages, with 37 plates, and so soon after abandon his conclusions as entirely untenable is, to say the least, very singular.

On this fluctuation of opinion, the Review er remarks "But may we not justly fear that such persons as have been led by the eloquent arguments of the 'Reliquiae' to rely on the supposed geological evi dence of the deluge as strong confirm ation of the authenticity of the inspired narrative, may feel then, faith rudely shaken on hearing from the same author ity that this farcical corroboration is a fallacy, that the evidence is no evi dence at all, and rested on an entire misconstruction of the facts."

The gist of the argument in the Reliquiae was the deposition of the bones of antediluvian animals in rocky caverns, in various parts of Europe, and found to be covered with a stratum of mud which the author supposed was deposited by Noachian deluge. We had considered this as an extremely doubtful solution of the phenomena noticed in caverns since they might be accounted for by other processes. The theory of the Pro

fessor to account for the deposition of gravel and bowlders by deluvial action, upon the highest mountains we deemed equally untenable. What has induced him to give up his former opinions does not positively appear from the review. It is said, however, that fur ther geological investigations have produced this change of opinion; and may we not justly inquire whe ther still further investigation are not likely to give another turn to the Professors opinions?

That the earth was once covered by water there is strong inclinations; but to account for the phenomena in various parts of it, by deluvial action, seems to us wholly insufficient. The most rational hypothesis to ac count for the Geological appearances on the Globe seems to us to be, that which supposes a long period of time to have elapsed from the first form ation of the earth, to its final preparation

for the residence of man, And this is now supposed, by the most learned Geologists to be the real cosmogony of Moses.

Among other interesting reviews in the two numbers to which we have adverted, the article on French Novels, in the London Quarterly, deserves the attention of the reader. After noticing a long list of these books; and giving accounts of singular trials of a capital nature in the French Courts, the Reviewer comes to the conclusion, that the state of mor als in at a low ebb in France; which he attributes to the multiplicity of fictitious works that are constantly is suing from the press of that Country.

And let me ask whether we are not following in the same pernicious train. Already is our Country inundated with this <u>trash</u> and our young people seem eager to seize the bait, without suspicion of the con cealed hook. If they have not the same effect here as in France, it is certain they are pro ductive of no good: they fix no useful principles, in the mind, but keep out useful knowledge.

24 Medium Coeli, or mid-Heaven The Right Ascension of this line is its distance from the first point of Aries, at the time and place of ob servation; and is found by adding to the given time the suns right as cension at the same time, and de ducting 24 hours, when the sum ex ceeds 24 hours.

When the R.A. of the mid-heaven and that of a star are equal, they are both on the meridian at the same time, the latter being <u>above</u> the pole of the heavens.

According to Burritt, a line joining Beta Cassiopeia, which lies at the dist ance of 32° on one side, and Megrez in Ursa Major, which lies at the same distance on the other, will pass through the polar Star. Their R.A. then must differ just 180 degrees. This will hold true, nearly of Alioth and Gamma Cas siopeia, orevery other circumpolar stars whose R.A. differ the same quantity. (See page 129 of this No.)

The R.A. & Decl. of <u>a Ursae Minous</u>, on the 8th of August 1836, according to <u>Bissel</u>, is as follows- 1^h-1^m20^s, 68 and 88°-25'-57".2 (apparent place): the <u>North Polar</u> distance then is 1°-34'-2",8.

To find this stars gradient azimuth, the common Rule is

Co. Sin. Lat: Rad. :: Co. Sin. Dect. : Sin of Azim. which at this season must be east. This deducted from the mag. Azimuth gives the Variation of the Needle west.

Ex. Lat. of Deerfield 42°, 32'-32" N.

Co Son. Lat 42°, 32' = (Logarithm)9, 86740.

: Rad. 10,00000 :: Co. Sin. Decl. 88°,26' 8,43680

Co. Sin. Decl. 88°,26' <u>8,43680</u> 18.43680

986740

: Sin azimuth $2^{\circ}-7' + = 8,56940 =$

the greatest elongation east, on 8th of August.

Suppose the magnetic Azimuth to be 9°-37' east; that is, the North Star bears N 9° 37° E. at its greatest elong ation, by the needle. Then 9°-37' 2° -7' = 7°-30' the variation west

Note This azimuth is assumed, as <u>near</u> the truth.

25 Governor Everett's Remarks, at the Meeting of the Young men of New Bedford, July 28, 1836, to devise means to raise funds to complete Bunker Hill monument.

On the utility of suitable monu ments to commemorate important events, most reflecting men are agreed and none in the history of the U.S. call more forcibly for such memo rials than the battles which were fought to establish our independence To us it would be highly gratifying to see these memorials erected on the sites of all our most important bat tles, and we have long regretted that the heights of Stillwater and Saratoga have not been thus de signated for the gratification of those who visit their fields, now become classic grounds.

But in this mode of marking those interesting scenes, one important <u>rule</u> should be adhered to viz: the mon uments

uments should be of moderate sizewithin the limits of economy, and con structed of the most durable materials. In the place of Bunker Hill monument its projections seem to have lost sight of this rule; the cost of the work exceeds all reasonable bounds, and this is seen by the people whose aid was expected in its erection. Ten thousand dollars would have been amply sufficient to answer the wishes of all men of real taste, and this sum would have been freely contributed. Such an attitude should have been chosen as would have carried its summit, some height above the buildings which might be erected in its vicinity. the great point to be re garded should have been to mark the ground to the visitant where the battle occurred on his arrival at the spot. It is not the magnitude of monuments that gives them their value; but their adoption to the design. The Battle of Bunker Hill, or more ap

The Battle of Bunker Hill, or more ap propriately

appropriately Breeds Hill is considered important in our revolutionary struggle, as it was the first real trial of the determination of the Country to resist the claims of Great Britain. But as a military exploit it did not exhib it much military skill particularly in the choice of posts. More strategic knowledge would have taught our commanders the impropriety of fortifying this penin sula, almost surrounded by water, of which the enemy were masters. It was, in short, a gross departure from all correct military rules; and had the enemy landed on the isthmus instead of Macton's point, and oc cupied Bunker Hill, General Wards detachment in Breeds Hill, would have been compelled to surrender af ter a short cannonade from the enemy on the former height. The only point for a retreat in that case being over the isthmus thus preoccupied by the British. The only lesson to be gathered from the

this affair is, that marksmen posted behind works, will sometimes be able to oppose regular troops with some degree of success, when they would not stand a moment in the open field:

New Orleans is another instance of this kind. We hope the time will soon come, when this empirical exploit will no longer be cited as a proof of the prow ess of undisciplined men.

In Gov. Everetts remarks he attempts to stimulate the young men to a con tribution towards the completion of the extravagant monument which a wild zeal has commenced. But re flecting men will not be moved by such persuasions; nor will they forget that the plan exceeds all the bounds of republican economy. Had the ex pense been limited, by the rule we have mentioned, Breeds Hil, long ere this time, would have been crowned with a monument suitable to the taste of republicans, and honorable to our

Country. But the error having been committed, it remains to divide what ought ought to be the future operations in regard to the completion of the monument.

Reasonable men will not be at a loss on this point. Its altitude is now amply sufficient for the object. Let then an ornamented cap complete the work, and the unnecessary plat of land surrounding the shaft, be sold for building lots, to defray the expense of finishing: And who would regret to see handsome edifices surrounding a small area, distinct ly marked as the center of the battle ground.

One remark of Gov. Everett claims notice, as evidence that he has taken but a superficial view of the subject to which he alludes. He says "If for no other reasons I would build it [the monument] to teach the present gen eration what the now divided

militia was in the days of our Fathers; to warn them how they permit the breath of a diseased public opinion to blunt the nerves of the national defence and deprive the Country if another day of trial should come, of the might that slumbers in a freeman's arms" His Excellency seems determined to restore the inefficient and rotten sys tem which has been practiced since the first organization of the militia by Congress and our state government, in opposition to the opinions of our experienced officers, and others who have long examined the system.

By the <u>divided militia system</u>, he chooses to understand the <u>divided militia</u>. He may indulge himself in this manner; but he cannot thus blind the discerning public; and remains to be shown whether <u>the</u> public opinion is <u>diseased</u> or whether he & others, who we fear judge only from the sur face" (as Genl. Washington expresses it)

are laboring under a fatal diathesis We cannot believe that he is intentionally at tempting to destroy the militia by restoring the old system; but we do say, the moment this is effected all reliance on the militia, as a <u>na</u> tional defence, will be at an end. We have touched upon this subject under the article "militia notions", in the forepart of this numbers and there given the opinion of Genl. Wash ington on this species of defence, with the outlines of an efficient militia, and shall therefore desist from further remarks in this place (See page 13—Also 16th, article, remarks on 4th of July toasts, page 117, et Seq.

26 <u>Tides in our Great-Lakes</u>
We now and then hear it asserted that the waters of our great western lakes, have a periodical rise, as if acted upon by some regular cause and this period is supposed to be

seven years. The present is said to be the 6th year of the rise in Lake Ontario. The belief we presume is without any solid foundation, and probably had its rise from the assertion of some one who had the boldness to advance it. The Newtonian theory of the tides is now established on a foundation that cannot be shaken, though we sometimes hear of new theories by some pretended philosopher who wishes to acquire a name.

That the waters of the western Lakes may rise and fall in different years is probable: but this variation must be small, and cannot be confined to peri ods of years without the action of some of the heavenly bodies; and if such action be admitted supported to exist the effect would be diurnal and not in a per iod of years.

If the waters of the Lakes are found to have a rise and fall, this may be explained by other causes, than those which provide tides in the ocean. In rainy season and in the spring, fol lowing great depths of winter snows, as in the last, the rivers may be so swollen as to occasion a small rise of the Lake waters; but these circumstances by no means occur at regular periods. To establish the fact of such variations in the Lakes, a long series of observation are necessary, made with the greatest care, by those qualified for the task. When this shall be done, and the fact of the periodical rise of the waters established, we shall readily assent to it, though no regular cause can be assigned for the phenomenon. We would not with hold assent to a fact because we are unable to explain it by known laws: but when any thing is said to occur which seems to militate against established principles, we think it reasonable to withhold belief, until strong evidence is [and here men will differ in respect to due assent. Those who are unacquainted with

with the Newtonian theory of the tides will not readily see why they may not be formed in the great lakes, as well as the ocean; but no one who has carefully examined this theory, will be at a loss to explain the fact of their non existence in such bodies of water. The waters of all Lakes having an outlet must necessarily subside, from the abrasion of the rocks in the beds of the outlets; and there is irri sistable evidence to prove that our great Lakes once occupied a much higher level than at the present time; and per haps Lakes Ontario & Erie, if not the others connected with them, may in time, be wholly drained of their waters, and present extensive prairies of alluvial deposits, suitable for cultivation, in which case, organic remains may probably be found similar to those presented in many tracts which are now dry Lands. And such alteration in the surface of the Earth afford the most easy solutions to the phenomena every where presented.

27 <u>Variation of the Magnetic Needle</u> deduced from the greatest eastern azimuth of <u>a Ursae Minoris</u> or pole Star, August 23, 1836= 7°-32'-25" W.

The Magnetic azimuth was taken with an accurate Circumfrentor, by 2 plumb lines suspended in a clear calm evening, and the true azimuth calculated, by the Rule given in page 146 of this No. from the following data

Lat. of Deerfield 42°-32'-32"N. Declination of <u>a Ursae Minoris</u> 88°-26'-2",9 from Bessel's tables, corrected for aberation and notation.

True az. deduced 2°-07'-35" East.

Mag. Az. <u>9-40</u>

Diff = 7-32-25= Variation

Thence being a small difference in the magnetic az. as given by the opposite ends of the needle, a mean was taken. As fol lows: N end, N 9-45E. S. and, S. 9-35W Deff. 10. Hulf Duff. 5 + 35' = 9°-40'= mean mag. azimuth.

See the article <u>Variation</u> in the 18th Vol. Edin. Ency. and Harstein's theory of the variation on the supposition of four mov able Magnetic poles.

From a mean of variations determined by Azimuths of the sun and stars, taken at Deerfield in Feb 7, 1812, the variation was found to be 5°-28' West. Since which the de clination has increased 2°-4'-25'(in 247^m) = 5'-11" a year. The change of the mo tion of the Needle is supposed to have taken place about 1812, the cause of which remains to be determined. Some writers date the change at an earlier period while others do not admit a change. Mr. Gillet, Surveyor Genl. of Con necticut, states that Dr. Bowditch finds the declination to be diminishing as us ual, at Salem, Mass. and in a conversa tion I held with professor Farrer of Har vard College, a few years ago, he doubted the fact of the change. The plenary evi dence in support of the fact at this time leaves no one longer to doubt. And without a corresponding allowance of variation, no old line can be run in the western part of Massachusetts Connecticut or in the State of New York.

Florida Militia

28 A winter at <u>Micanopy</u>, East Florida August 2—makes the following judicious remarks on the man called into the field.

"The militia of our Country are brave and admirable men, but in the field they are thinking of their homes, and wives and families, of their crops and country houses, and their notes in bank. A man who has all these things to think of may be very brave, but he is unfit ted to be a good soldier."

Amongst the wild notions of many of our <u>young patriots</u>, who all so often trumpeting forth the prowess of citizen soldiers, and boasting of the <u>might that slumbers in a freeman's arm</u>", it gives us some satisfaction to find men in the community who are not carried away by such idle vociferation.

The discerning men of Florida have had a fair opportunity to test the services of <u>citizen soldiers</u>, in the field, and they

they account for their inefficiency for the true cause. Men, they have found, may be brave and good citizens and yet be wholly unfit for service in the field of mars. Similar oppor tunities, we are confident, would teach all advocates of the <u>old militia</u> sys tem a similar lesson.

The habits and inclinations of citizen soldiers, as pointed out by the Florida writer, are by no means matter of reproach; but they are plain reasons why these men are not to be relied upon in the field, as soldiers. Nor would we wish to see them divested of these commendable domestic virtues. Let such men remain at home, engaged in their proper employments, essential to the influence of the community to which they belong.

But, ask our advocates for the <u>old</u> <u>militia system</u>, on what force would you rely for defence? We answer. Within the United States there are at least

100,000 men whose habits and ind nations lead them to relish the em ployments of soldiers. Le these be organized into proper corps under intelligent officers, armed and equipped by government, and trained in camp a certain number of days annually; and subsisted and paid while thus employed: their elite corps to be held ready for service on the shortest no tice. The $\frac{\text{remaining}}{\text{other}}$ part of able bodied men between 21 and 40 years of age, to be armed, and held to supply recruits for the elite, as circumstances may require. The men of the elite corps to be engaged for a certain term of years and classed, so that when one part, have served out their term, others may be taken to supply their vacancy. A system of this kind would afford complete for defence for the U States, & would be on no great ex pence compared with its utility. We have often touched upon this

subject, and we shall not hence spend time to answer the purile pre tence, that such a plan would savor of a standing army, and be dangerous to the liberties of the Country We will only ask the advocates of the old system, whether the "danger" from such a select militia, would be equal to that which results from the present useless incumberance which many military man knows is little better than no defence? One severe war would cure us of our present frenzy & notions, in re gard to a national defence. It is time for our discerning men to look seri ously to this important subject. The lethargy of Congress on this sub ject is astonishing and a severe tax on upon their wisdom. If eagle eyed on other subjects, here they are un der an obstinate cataract, which can be cured only by the people at the ballot boxes.

The Weather

29 Since our last notice under this head page 36, the weather has been cool for the season, and in several instances in the morning, frosts have been noticed, but not sufficient to injure vegetation very materially. At this time, September 2, the air is still cool, and a small frost I am informed was seen this morning. The crop of Broom corn is very backward not more than one half of the stalks have put out their brush. Indian Corn appears more favorable, but does not promise a large crop. One fact is singular. During the summer thus far, I do not recollect one old fashioned thunder shower. Indeed it may be said we have had none excepting two or three small ones in the forepart of the season. Should the cool weather continue much longer our crops must be small, particularly that of the Broom Corn. Our second crop of Grass has suffered considerably for want of rain, and is rather small.

30. The Emancipator. Emancipator.

This is the title of a weekly paper re cently established in the City of New York, with the motto "Proclaim liberty throughout the land, unto all the inhabitants there of" The paper is published for the antislavery society, and is intended to be circulated in all the non-slaveholding states, for which purpose a large number of agents are appointed in all those states. The Editor is A.A. Phelps, who we understand is a Clergyman.

In three numbers sent to me through the Post Office, is a Discussion between Mr. George Thompson, who lately resided in the U States, and the Rev. R.J. Breckinridge of Baltimore, on the subject of Slavery. Meetings for this purpose are held in Glasgow in Scotland, the Rev. Dr. Wordlaw presiding of ficer; and numerous inhabitants of that and other towns, it is said, attend the discussions. The exertions of Mr Thompson

in this country are well known as well as the unjust abuses he suffered here from those who are unwilling to touch the disgraceful subject of Slavery as it now exists in the southern states. Mr. Breckinridge professes to be opposed to Slavery, and attempts to show that the only means to put an end to it is by [the Colonization Society. Vain hope. now pretty well understood by the hon est part of the community. Whether the paper will be sustained I think is a little doubtful. Lamentable as it is, there seems to be a want of princi ple in a great portion of our people; and for the support of such periodicals it is necessary to enlist their cupidity. Though people may at first be raised to a sense of duty, this spirit will be found to be short lived, unless, some pecuniary ad vantage results from it. In the contest with masonry we have noticed a similar result In short the spirit that prevailed the coun try at the commencement of our Revolution seems to have become dormant. Dead!

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